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MINISTERE DE LA CULTURE  
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ANNALES  
DU SERVICE DES ANTIQUITES  
DE L'EGYPTE



TOME LXIV

LE CAIRE  
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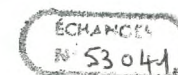
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*Mélanges Ahmed Kamal*

I



## FOREWORD

Issuing a memorial volume of the Annales devoted to Ahmed Kamal began in 1971 with the intension to commemorate the 50 anniversary of his death. But owing to many internal changes both in the Ministry of Culture and Antiquities Department this was scheduled till this year to fall with the 130 anniversary of his birth.

Thanks to all who aimed to celebrate the memory of this Egyptian pioneer.

Cairo, August 1979.

Dia' Abou-Ghazi,



**AHMED KAMAL**  
1849 — 1923.



## AHMED KAMAL

1849 — 1923

by Dr. DIA' M. ABOU-GHAZI.

Ahmed Kamal, the well known Egyptian archaeologist & Egyptologist, born in 1849 (=29 Shaban 1267 H. ١٢٦٧ شعبان ٢٩), died on 4 August 1923; a usual span of life full of active deeds that made Ahmed Kamal outliving his time. Back, briefly(1), step by step with the man and his work.

### First stage

Studies archaeology in the school founded by H. Brugsch; works as secretary-interpreter and teacher of the German language, then as interpreter in the Antiquities Department.(2) He attains by this his aims and destiny. Intending to reveal the glory of ancient Egypt to his compatriots writes several books in Arabic dealing with all faces of the Egyptian civilisation.

### 1898

- In June 1898, he discovers the pylon of Qus mentioned in «Description de l'Egypte III, p. 417-418 & pl. Ia in vol. iv». Results published in ASAE. III, p. 213-235.

### 1900

- Excavations at Deir el-Bersheh (3) March-April 1900. (4) Results (5)published in ASAE. II, p. 13-45; represented in the Egyptian Museum (at Giza) mostly by wooden sarcophagi(6).
- Seven Days of excavations in El-Hibeh, (7) in which he discovered various objects. Results published in ASAE, II, p. 84-91.
- In April he began the preparation of a «Catalogue Général» volume «stèles ptolémaïques»(8).

- 1) This will be published in detail, as well as his bibliography and biography in the volume, now in preparation to celebrate the sixty anniversary to his death which appears in the set titled «Vies et Travaux», published by the Museums Service.
- 2) Appointed afterwards as Assistant curator.
- 3) Deir el-Bersheh is on the eastern side of the Nile south of «Sheikh Abada» used as a rock-tomb cemetery in the time of the 11th & 12th dynasties for Ashmonein Governors.
- 7) Work began on 7-3-1900 after a demand from Mr. Yassa Tadros. costs amounted to £11.940. see Maspero, Rapports 1881-1910, pp. 17.
- 4) Given in two reports. The first on 7-3-1900; the second on 26-5-1900.
- 5) A detailed list of his finds and bibliography will appear in the set titled «Vies et Travaux».
- 6) Extending from north to south on the Nile left side facing el-Fachn and el Fente.
- 8) Maspero. op. cit., 28.

## 1901

- Second season at Deir el Bersheh (January-March 1901). A intact tomb of Thotmakhti was revealed after making a well (puits) of 40 x 40 m. deep. Contents transferred to the Egyptian Museum Giza. Results published in ASAE, II, p. 206-222.(1)
- Inspection at Tell Far'on (ancient Bouto). Results in ASAE, III, p. 7-14.
- Inspection at Siout. Results in ASAE, III, p. 32-37.
- Charged by the Egyptian Museum on 8 December 1901 to examine the site of Arab-el-Borg and gives report on the situation there. Results in ASAE, III, p. 80-84.

## 1902

- According to a note received from a patriot named Mohamed el Tawil, (2) Ahmed Kamal begins his excavations at Matariah. A hypogee of Ramsés III Mnevis was the result, transferred to the Egyptian Museum in July. Results published in RT, XXV (1903), p. 29-37.
- In April 1902 charged to transfer to the Egyptian Museum a stela from Kafr Abou-Shahaba village, Bibeh district, Beni-Souef Province, re-used in a mosque there, registered under No. 35553, published in ASAE, III, p. 243-244, under title : Stèle d'Acoris, deuxième roi de la XXIXe dynastie. Also charged in the same month to examine a monument found in Boulaq. See ASAE III, p. 92-93.
- Gives a report on the six months of excavations at Deir el Bercheh executed by M. Antonini of Mallawi in which he studies the interesting objects added to the museum (Fouilles à Deir-el-Barché...par Antonini).

## 1903

- Excavations in Gebel el-Teyr, Tehneh, Ouasim, as well as opening a tomb in Zitoun : Results published in ASAE, IV, p. 95-96.

## 1904

- See BIE, p. 89-127; BSGE, 6e série, No. 6, p. 281-312.

## 1905

- Visits several sites for inspecting. (see ASAE, V, p. 199 & VII, p. 238-239, and RT, XXVIII).

## 1906

- Charged on 5 March 1906 to examine blocs in Tell el-Waga north of Mahallah el-Kobra. He profits of this opportunity and examines the site, Results published in ASAE, VIII, p. 1-2.
- Excavation at Atfih on 21 June 1906 for three days, resulted in discovering an interesting tomb. ASAE, IX (1908), p. 113-117.

1) See Maspero, op. cit. pp. 39. Costs of this season amounted to £ 47.892.

2) See Maspero op. cit., pp. 71. Excavations expenses amounted to £E. 4.580.

## 1910

- Good results in Sayed Khachabeh Excavations(1) where was discovered in Ganadlah a cemetery for Aphroditopolis princes containing wooden sarcophagi inscribed with new texts(2). Results published in ASAE XI, p. 3-39; XII, p. 128-142, XIV, p. 45-87, XV, p. 77-206.
- On 4 February 1910 he begins excavations on a cemetery north of Mangabad (north of Suit). ASAE, XI, p. 3-7, XV, p. 179-185.
- Deir Rifa excavations' (23-12-1911- 3-1-1912) : 52 objects were discovered, as well as a Coptic tomb containing six other objects. ASAE XIV, p. 67-72.

## 1911

- Excavations at Dara situated in the Libyan desert facing Manflout. Excavations began on 4-4-1911, ASAE, XII, p. 128-136.
- Excavations at Qoceir el Amarna. ASAE, XII, p. 136-142.

## 1912

- Again Excavations at Manqabad, that gave many objects distinguished by a very fine set of jewelery. Results in ASAE, XV, p. 179 — 185.
- Excavations at Deir el-Gabraoui(3) began on 20-1-1912, only for about 8 days. Results published in ASAE., XIII, p. 161-163.
- Excavations in the area between Meir and El-Akhsas in the western mountain. This excavation began on 4 February 1912 till 15 March 1912. Results in ASAE, XIII, p. 163-165.
- Excavations at Hamid valley in Abou-fida mountain on 16 March 1912 for about ten days where a Coptic tomb was discovered with several interesting objects and textiles, ASAE., XIII, p. 165-166.

1) Sayed Khashabeh was a merchant of Asyut. He obtained permit to excavate in a very large area on both Nile banks between Deirut and Deir el Ganadiah. Thus it includes Meir and Kuseir el Amarna. These excavations were at intervals beginning with February 1910 till 1914. See Blackman, Meir I, p. 16; Maspero, op. cit., pp. 3-5, Mohammed Séoudi shared in the expenses, see A. Kamal, ASAE, XI, p. 3, Also see ibid, XV, pp. 177.

2) For the set of the Egyptian Museum (Cairo) See e.g. Lacau, Sarcophages ant. Nos. 28091-28095-28097, 28098, 28123-28125, Mallaway Museum, el Ganadlah. 559, 560, 563, 569; British Museum 34259; 55315; Louvre A 23; Metropolitan Museum & Cleveland Museum keep examples from this set.

3) Excavations sponsored by Said Khachaba. The zone of Sayed Khachaba is situated on both sides of the Nile from Baouit (in the north) to El-Ghanafm in a very large area on both Nile banks between Deirut and Deir Guide, Nos. see note 1.



## 1907

- Excavation at Tell-Gamhoud(1), work began on 27 March 1907 for about a week. Results : A Ptolemaic cemetery revealing a new type of wooden sarcophagi, some cartonnages and other different objects, in Cairo Museum, Budapest, Vienna and Gracow. Results published in ASAE. IX (1908), pp. 8-30.
- Charged to examine a door used in a building in Tell il-Ashâar (in Borollos region). He examines all the tell as well as Baltim. Report in ASAE. IX (1908), p. 141-147.
- Excav, at Baltim in the eastern extremity of lake Broulous, resulted in identifying the debris of a small Ptolemaic temple. Results published in ASAE, IX, p. 141-147.
- Inspects in November 1907 an ancient quarry situated on the north east of the citadel neighbouring the modern quarry called  
مخاجر زاوية ناصرة  
see ASAE, IX, p. 90-91 (VII), as well as other sites in Giza & Tell-Basta. *ibid*, p. 85-91 & 191-192.
- Charged to direct the excavations of comte de Galarza west the temple of the Sphinx about April 1907. Reported in ASAE, X (1910), p. 116-121, where interested objects have been discovered.

## 1908

- See ASAE. IX; BIE, 5e série II, p. 92-98.

## 1909

- Excavations in a zone between Deir el-Bersheh and Sheikhah Zobeida sponsored by S.E. Idris bey Raghîb. From 22 October 1909 to 30 October 1909. This zone was used as a cemetery for Hermopolitans from the Old Kingdom. (Finds reported in ASAE. X (1910), p. 145-152.
- On 23 Mai 1909 he brings from Heliopolis two fragments from a corniche, ASAE, X (1910), p. 154 (IV).
- Records an inscription on a statue base, *ibid*, p. 154 (III).

1) Situated between Fayoum and Beni-Hassan, west el Fashn. A tomb was discovered there secretly by a citizen called Mohamed Fath al-Bab who seaked the help of another inhabitant called Tawdros Fârag. Failing in continuing secretly this excavation, the latter asked the help of the Polonian Smolenski who was working in Sharouna, Smolenski asked permission from Mr. Maspero and thus excavation began by him officially from 4 Mars 1907 to 26 March 1907, continued by Ahmed Kamal. See Maspero op. cit., pp. 236, & A. Kamal, ASAE, IX p. 8-9.

## 1913

- Excavations at el-Atamneh, a small village 6 kilometres south Darah. See ASAE, XV, p. 185-191; see also *ibid*. p. 184.
- Excavations at Sherifeh situated on the Libyan border west of Mesra and Beni-Ghalib. Results published in ASAE, XV, p. 191-195.
- Excavations at Titalieh began on 15-4-1913 for few days in which was discovered a Greco-Roman cemetery facing Titalieh. Results published in ASAE, XV, p. 195-198.
- 4th season of Excavation at Meir; 4 Mai 1913-30 Mai 1913. ASAE, XV, p. 198 — 206; see also *ibid*, p. 177.
- Excavations at Deir Dronka, began on the 15 November 1913 for about 20 days. Mostly Coptic finds. Results in ASAE, XV, p. 65 — 66.
- Excavations at Siout (North east of the Siut mountain). It began on 7 december 1913. Results in ASAE, XVI, p. 65-114.

## 1914

- Ahmed Kamal leaves the Antiquities Department after a service of 42 years(1).

## Last stage

- Continues his work in his big dictionary; gives several lectures in «Institut d'Egypte», and writes several articles in ASAE.

Life to him was work and nothing but work. Thus we find him excavating, inspecting, working actively in the Egyptian Museum, sharing in its transfer from Giza to its new building in Kasr el Nil and in its «Catalogue Général»; translating into Arabic its guide as well as that of the Greco - Roman Museum; recording his achievements in numerous books and articles; giving different lectures, persuading teaching Egyptology and asking the Government to establish a school for such a study, continuing his activities on pension giving more interest to his hieroglyphic dictionary.

But all this reaches its end; on 4 Aug. 1923 he passes to the Other World dropping from his hands the volumes of his big dictionary on hieroglyphic and corresponding Semitic languages, still waiting to find its way as major reference.

Dia' Abou - Ghazi.

1) See Rapport du Service des Antiquités 1915, p. 55.

## HARNAKHT, CHIEF BUILDER OF MIN

By G.A. GABALLA

From time to time objects that are out of the ordinary and not immediately explicable present themselves in the course of Egyptological enquiry. In Room 19 of Cairo Museum (ground floor), a pair of blocks come under this category. Each is like the segment of a circle with inscriptions on the top surface. These are arranged as though the two blocks belong to opposite sides of the same semi circle (pl. I). In the **Temporary Register** of the museum they are numbered 18.1.25.1, and are assigned the measurements 92x55x19 and h. 32 cm. No provenance is given.

### Description of Scenes

The two blocks bear almost identical decoration in two registers. In the upper register of each, Harnakht and his wife Wadjetronpe are illustrated sitting side by side with a table of offerings before them and a bouquet of flowers under the chair. Both have a cone unguent on their heads, but while the woman has one arm around her husband's shoulder, the man holds a lotus to his nose. On the two blocks these scenes face inwards, towards each other. The bottom scene shows the man clad in a leopard skin and performing the rite of censuring and libation over offerings. The texts above and in front of him read: "A thousand of bread, beer, cattle, and fowl for the ka of the Osiris chief builder of Min, Harnakht". Curiously both scenes are orientated to the right, instead of facing each other as do the scenes in the upper register.

### Texts

#### A. Left-hand Block, Upper Register (pl. II and fig. 1)

"(1) A boon which the king gives (to) Osiris, chief (2) of the "West", (to) Hathor, residing in the necropolis (3) (and to) Anubis, chief of (4) the god's booth, that they may give invocation offerings of bread, beer, oxen, and fowls to the ka of (5) [the chief builder] Harnakht and the lady of the house Wadjetronpe".

#### B. Right-hand Block, Upper Register (pl. III and Fig. 2)

"(1) A boon which the king gives (to) Osiris, chief of the (2) West (to) Hathor, residing in the necropolis, (and to) Anubis (3), chief of the god's booth that they may give (4) invocation offerings of bread, beer, oxen, and fowl, and every thing good and pure to the ka of the chief builder of Min, Harnakht, and (to) his sister, the lady of the house, Wadjetronpe".

### General Commentary

Of the chief builders of Min we know of hardly any one except this Harnakht<sup>2</sup>. Another monument that almost certainly belongs to the same man as our Harnakht, is the fine limestone table of offerings in Cairo Museum, Cat.





fig. 1

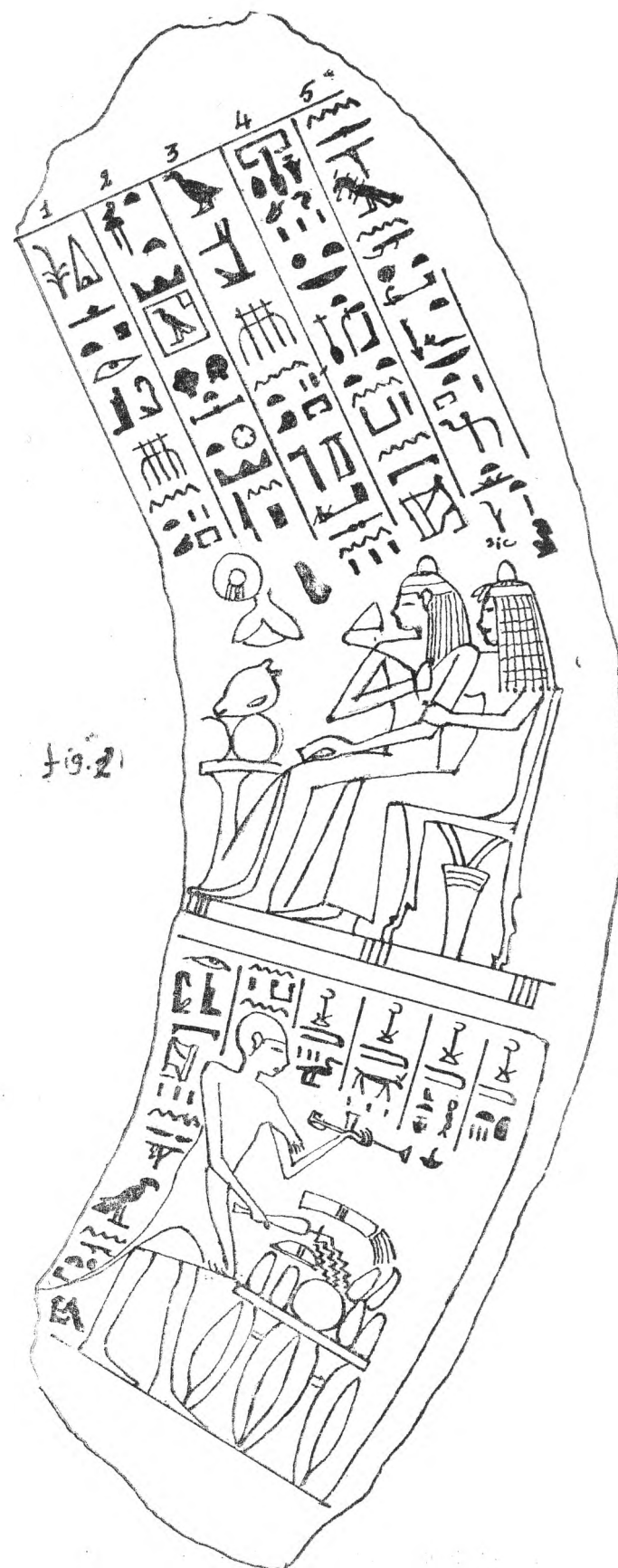


fig. 2

Gen. 23084<sup>3</sup>. It is shaped like the **htp**-sign and measures 55 cm. in length and 38 cm. in width (including the protruding portion). Its place of origin is not known. The top was divided into two equal parts by a horizontal line of hieroglyphs, but owing to an almost oblong hole that has been cut in the centre, part of the inscription is lost. Of what is left we can still read; "The chief builder of Min, lord of I[p]u.....". The two halves are occupied by beautifully executed relief depicting all kinds of offerings (pl. IV and fig. 3).

Around the edges of the table are two **htp di nsw** formulae: on the right (pls. V, VI, VIII and fig. 4 A-B-C), one reads: "A boon which the king gives to Ptah, Sokar, and Osiris, that they may give cool water, wine and milk to the ka of the chief builder of Min, Harnakht, justified". On the left (pls. V, VII, VIII and fig. 4 D-E-F): "A boon which the king gives to Re'horakhty, (to) Osiris, chief of the West, (and to) Anubis, lord of To-djoser, the good (or great ?) god, that they may give bread and beer to the ka of the chief of builders of Min, Harnakht, justified".

The evidence from this second monument proves that Harnakht directed works for Min at Akhmim (Ipu) rather than at Coptos. While Harnakht was strictly a master-builder, other officials who did work for Min of Akhmim in Dynasty XVIII bore the wider titles **imy-r k3t** and **hry k3t**. Such were the man, name lost, with the former title in the rock-chapel of Ay4, and one Reya of whom a shabti was found at Abydos<sup>5</sup>.

It is rather difficult to assign a definite date to Harnakht. A. Kamal suggested the XVIIIth Dynasty, basing himself on the fine workmanship of the table of offerings. This may well be so. However, the other two blocks, published here, show conventional style that might suggest late XVIIth or even early XIXth Dynasty. If so, this agrees well with the importance of Akhmim and its notables from the reign of Amenophis III onwards<sup>6</sup>.

Judging by the contents of the inscriptions, the twin blocks must have come from Harnakht's tomb. But what possible function could they have fulfilled? At first sight, they together take the form of an arch. This in turn may suggest that they once topped a narrow doorway or niche, in close proximity to a vaulted roof, whose section the arch would imitate.

In the New Kingdom, tomb-chapels are known at various sites along the Nile Valley whose architectural features incorporate this mode of construction. At Abydos, not so far from Akhmim, such chapels were found (built of brick) whose cult-rooms were simply chambers with brick vaulted roofs<sup>7</sup>; likewise as far away as Aniba in Nubia<sup>8</sup>. The twin blocks of Harnakht may therefore have been the arch of a niche at the rear of a brick vaulted cult-room in tomb-chapel of this general type. They may have rested upon stone jambs, now lost. The offering table may well have come from the very same chapel.

As possible support of this interpretation a third monument of Harnakht may be presented. It is a pointed top limestone stela hung on the wall of R 10, E 2 in the ground floor of Cairo Museum (pl. IX and fig. 5). It bears

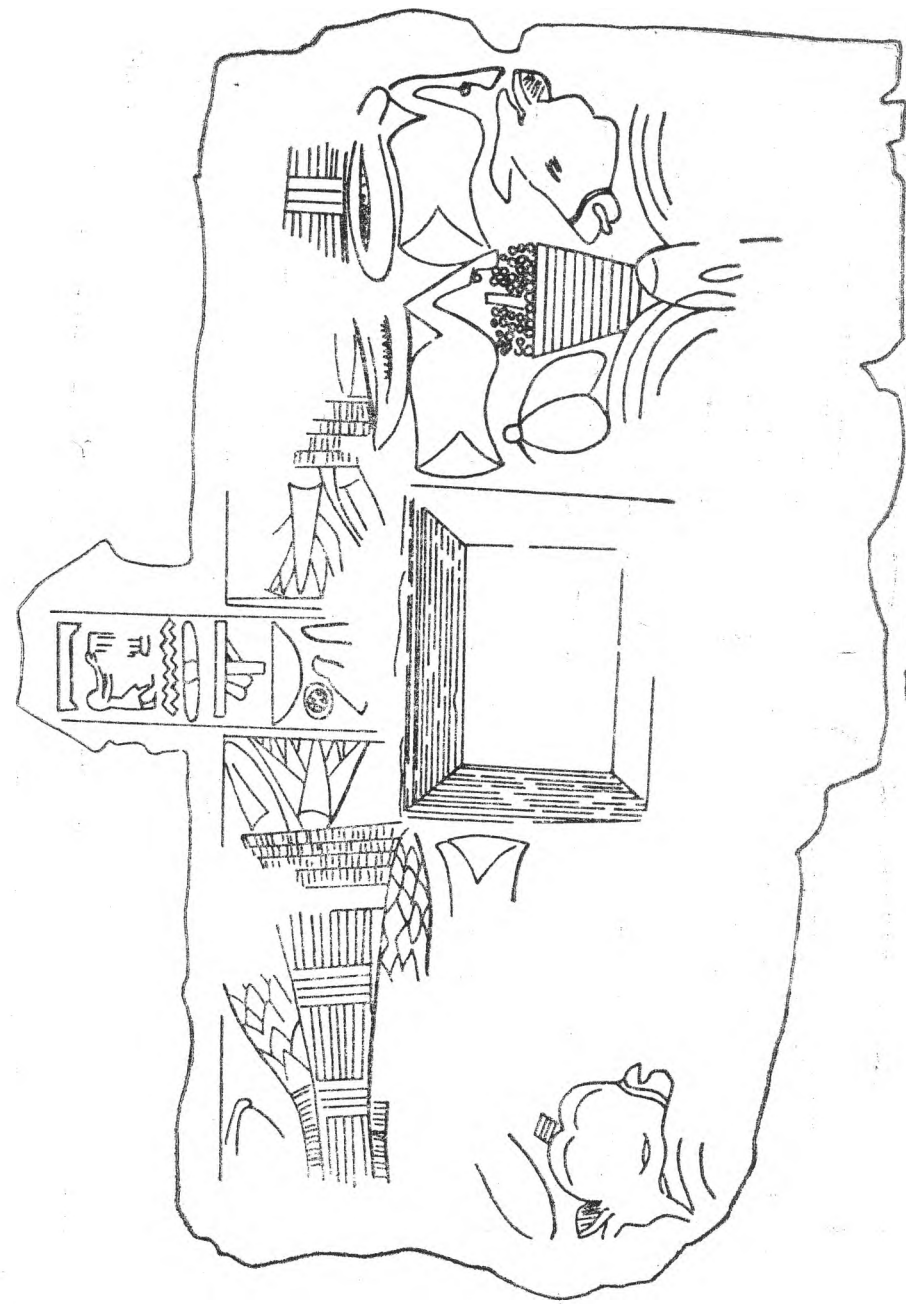


Fig. 3

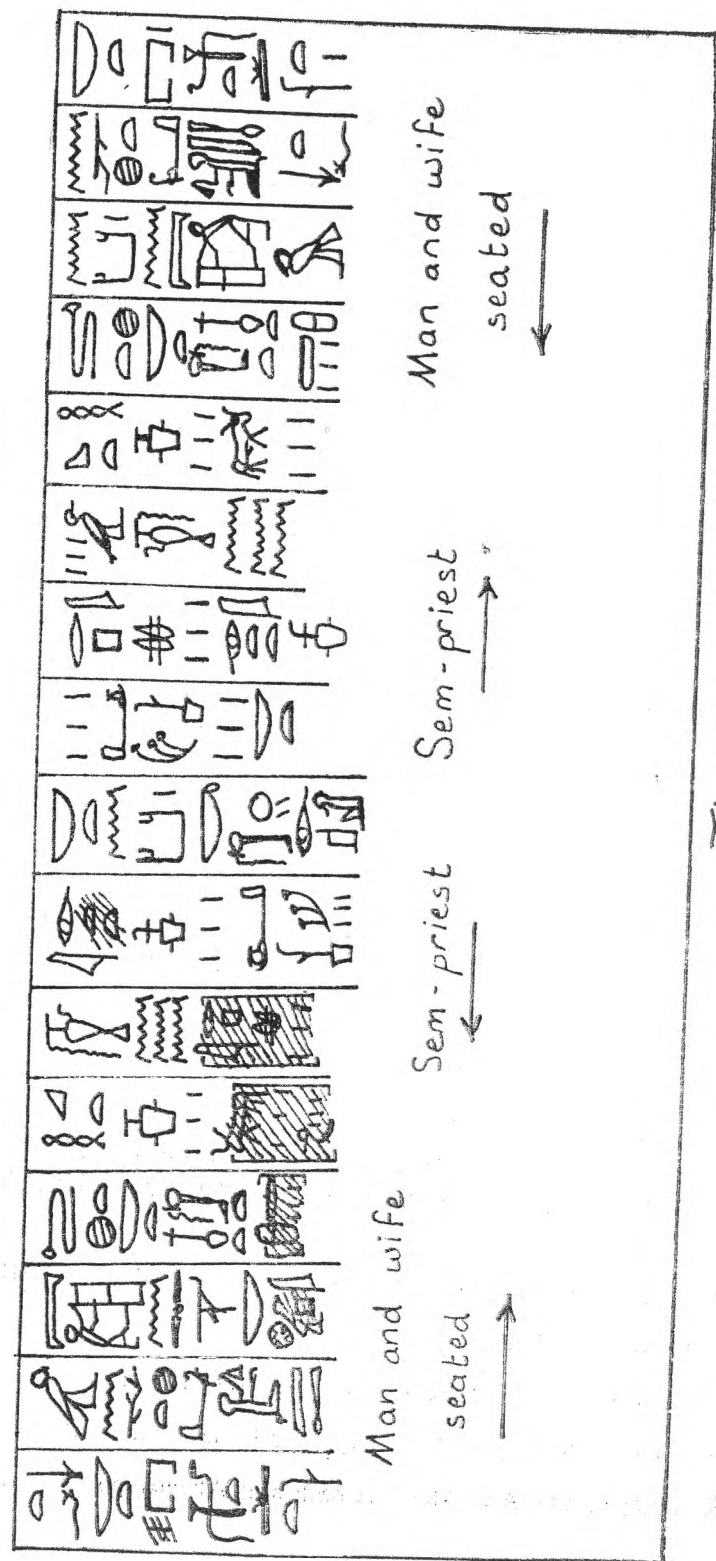
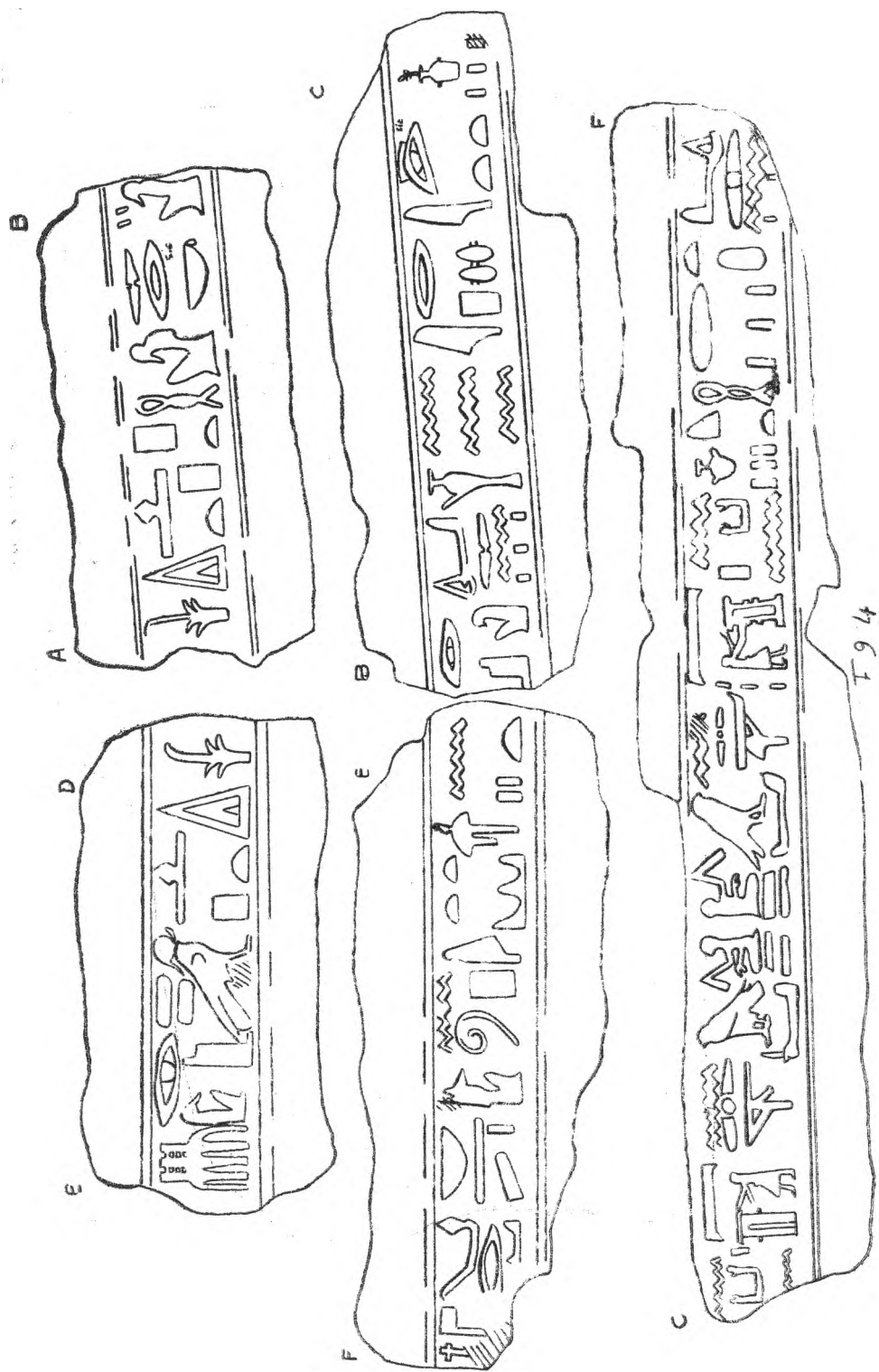


Fig. 5



the JdE No. 26888 and measures 104 cm. in height and 64 cm. in width. According to the **Journal** its original provenance is Akhmim.

The face of the stela is divided into three equal parts. Whereas the top and bottom parts are void of any inscription, the centre panel is occupied by two symmetrical scenes accompanied by texts. The two scenes are almost entirely identical although the one on the right is better preserved than the one on the left. In each case Harnakht is shown wearing a long robe, a wig and seated on a chair. Behind him is his wife Wadjetronpe who places one arm around his shoulder, and lays her other hand upon his near arm. Before the couple is a table laden with offerings. A sem-priest wearing the leopard skin, characteristic of this clerical class, pours a libation from a vase on the offerings. Above the two scenes are sixteen columns of hieroglyphs also divided into two identical main inscriptions, and two closely similar outer inscriptions. The main texts read: "Offering every good and pure thing, bread, beer, oxen, fowls, fresh water, wine, milk, and presenting fresh vegetables to thy **ka**. Pure, pure O Osiris!". Above the man and his wife on the right: "To the **ka** of the Chief builder, Harnakht, justified; his sister, the lady of the house, Wadjetronpe". The legend above the couple on the left is slightly different: "Chief builder of Min lord of Ipu, Harnakht, justified; his sister, the lady of the house, Wadjetronpe".

This stela could very possibly have formed the rear panel of the suggested niche, framed by the curved slabs, in a brick-built tomb-chapel. At present, however, all this remains in the realm of speculation; any more convincing interpretation of these stones would be welcome.

As Harnakht's fine table of offerings was first published by the late Ahmed Kamal (who also edited much else from Akhmim), it may be fitting to present this brief study of a dignitary of Min of Akhmim in a volume which honours the memory of such a notable pioneer of Egyptian archaeology.

#### Footnotes

1. Variant omits Osiris and Min.
2. H. Gauthier, **Personel du dieu Min**, 1931, p. 102 (only this Harnakht from the table of offerings, now to be discussed), and Helck, **Materialen**, II, 1961, p. 172: 52.
3. A. Kamal, **Tables d'offrandes**, 1-2 1906-1910, p. 69 and pl. CVIII.
4. Lepsius, **Denkmaeler Text**, II 164.  
Newberry, **Funerary Statuettes (Cat. Gen.)**, p. 186, No. 47638.
6. C. Aldred, **Akhenaten. Pharaoh of Egypt**, (Abacus edition, 1972), pp. 71ff.
7. Cf. D.R. Maciver and A.C. Mace, **Amrah and Abydos**, pls. 25 : 1.26, and p. 70.
8. G. Steindorff, **Aniba**, II, 42-47.

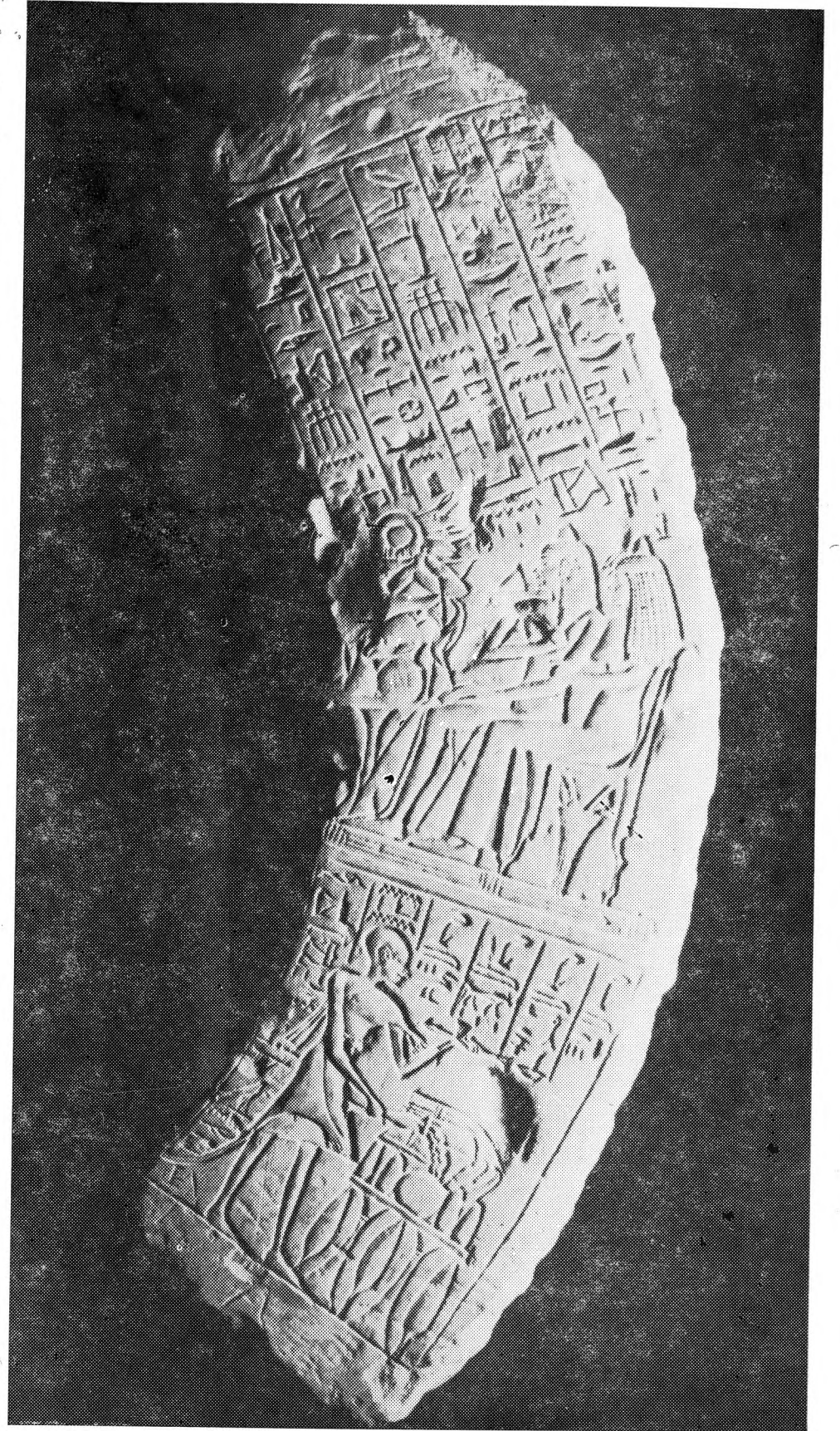


Pl. I. Two blocks, Cairo Museum Temp. No. 18.1.25.1



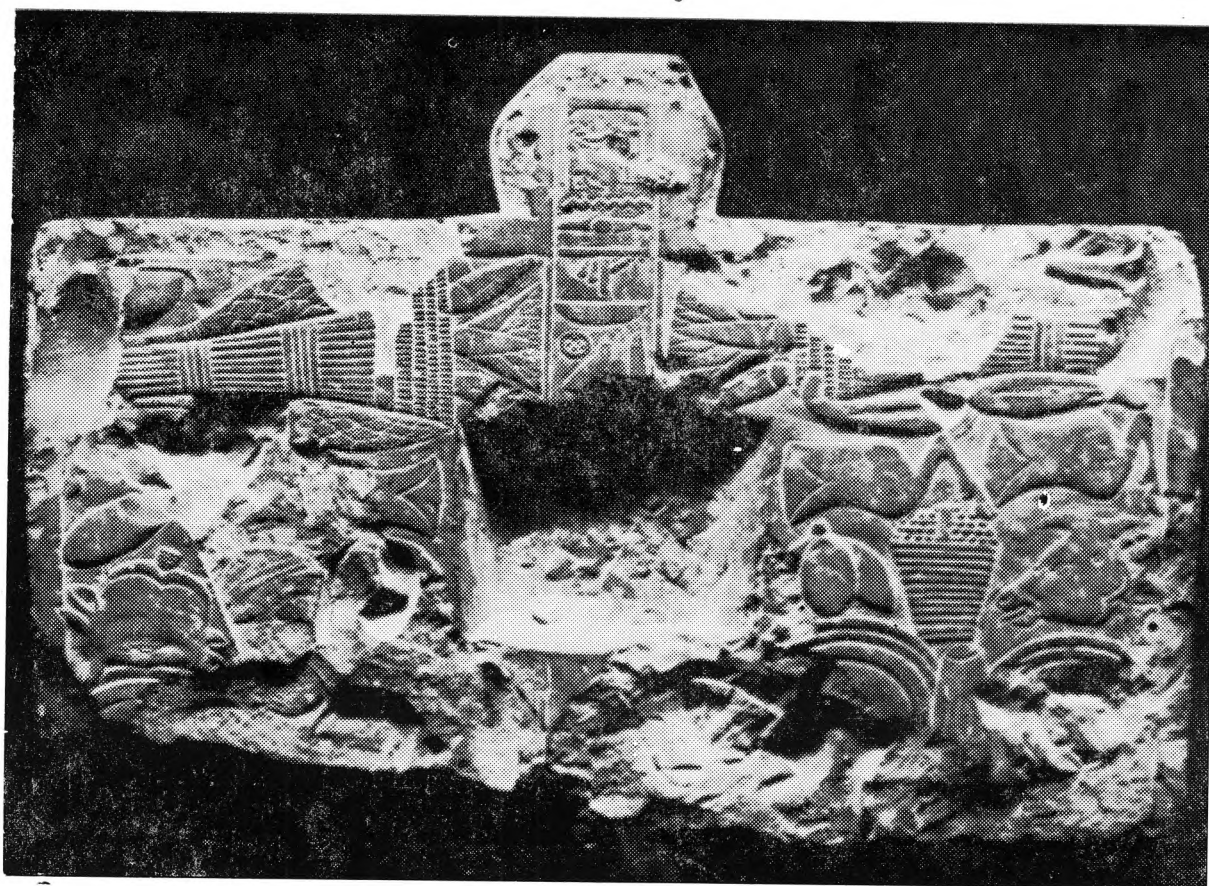
Pl. II. Left-hand Block.





Pl. III. Right-hand Block





Pl. IV. Table of Offerings. Cairo, Cat Gen. 23084. Top



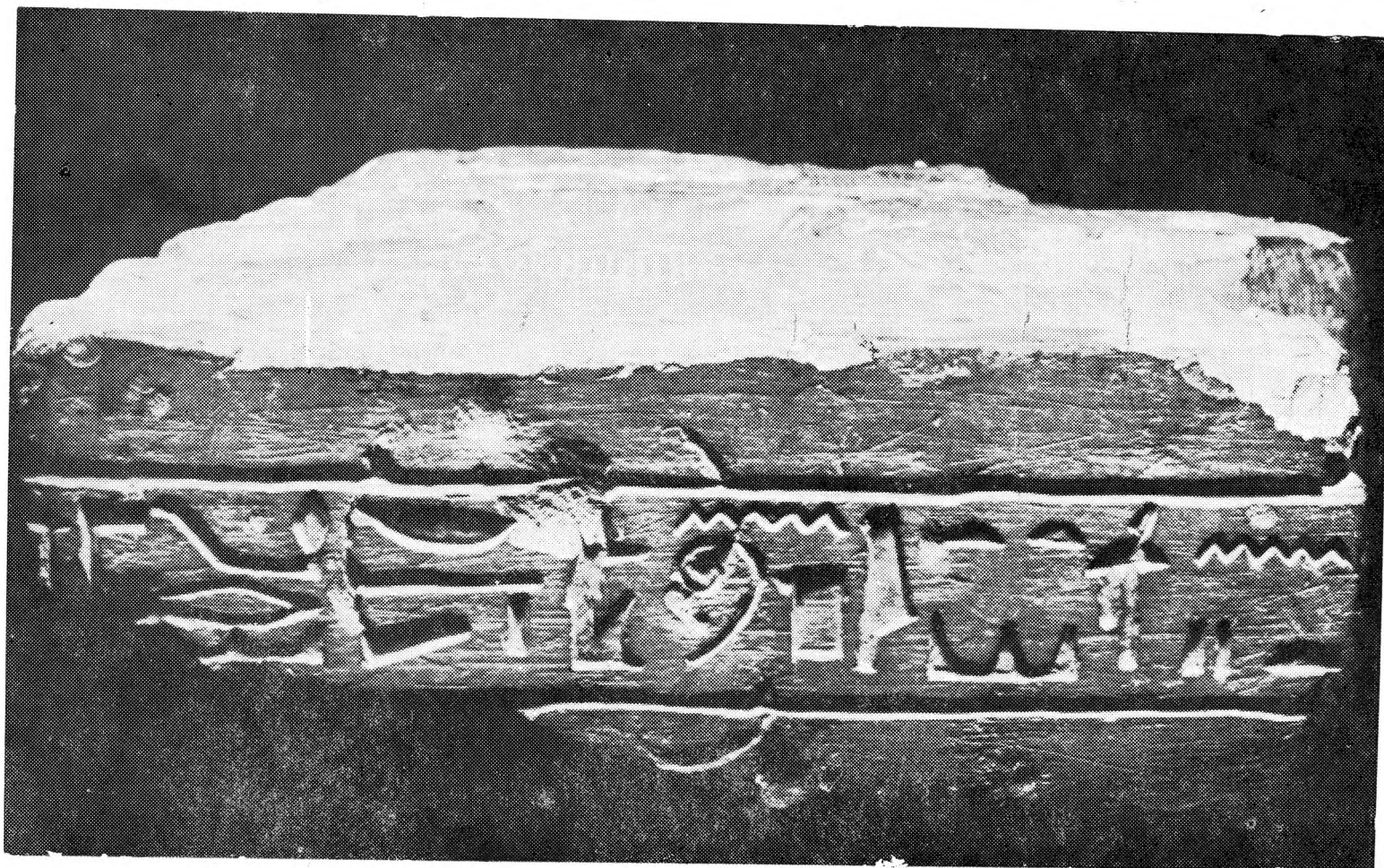
Pl. V

Pl. V. Same Table of Offerings, Front.



Pl. VI. Same Table of Offerings, Right side.





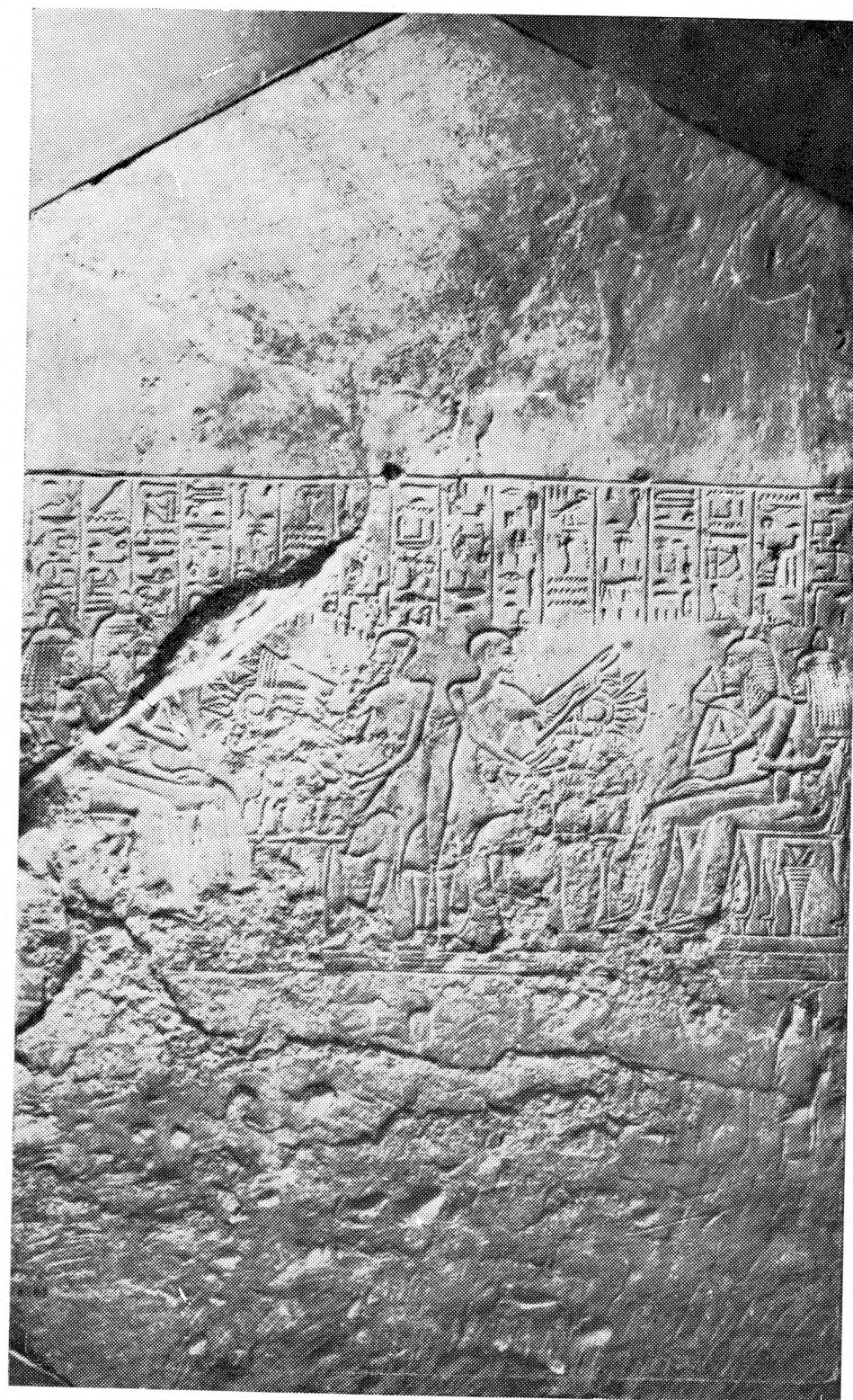
Pl. VII. Same Table of Offerings, left side





Pl. VII

Pl. VIII, Same Table of Offerings, Back



Pl. IX, Cairo Stela J.E. 26888

THE LIVER AND BILE IN ANCIENT EGYPTIAN  
LORE AND MEDICINE

P. GHALIONGUI

In studying the role of any organ in Egyptian thought as represented by the available texts, it is of obvious importance, first, to ascertain its name.

According to the best authorities and, in spite of the hesitation with which the Wörterbuch der Aegyptische Sprache accepted this identification (Wb. II, 44, 11ff), there is general agreement on the name of the liver being **mist**, cognate with Coptic **mawse**. This is an organ frequently mentioned in magic-religious litanies and in funerary offerings.

In litanies and magic utterings, disease-causing or noxious enemies or poisons are prohibited from entry into a list of body parts that identifies each part with a god, or assigns to it a protective deity

Thus, papyrus Chester Beatty (VII, vs. 4, 5-6) : «Thou shalt not take thy stand in his **mist** (liver), in his **wf3** (lung), in his **h3ty** (heart) in his **ggt** (?), in his **nasm** (spleen), in his **mhtw** (intestines), in his **spr** (ribs?) or in any flesh of his body, **Imsety**, **Hapy**, **Duamutef**, and **Kebhsenewef**, the gods who are in (his body) are against thee.

Not only are organs the seats of the gods, they are the gods, although in rare cases the divinities concerned are different (Naville, La litanie du Soleil : 14, 36 = 20; 41 = 32,33). As an example, the Turin papyrus (Pleyte and Rossi, 125, 9-10) : «His **nasm**, his **mist**, his **wf3** and his **mhtw** are **Imsety**, **Hapy**, **Duamutef**, and **Kebhsenewef**»

These gods were the four sons of Horus who presided over the four Canopic jars in which the mummified four organs were placed in the classical period. Later the four viscera, liver, lung, spleen, and intestine, were replaced inside the mummy, each with a small wax statuette of the appropriate god.

In these jars, **mist** is, with few exceptions, identified or associated with **Imsety** and, as Gardiner (Onom, II, A 247) justly remarked, since "paronomasia has here played an unmistakable part, we may regard the equation **mist** = **Imsety** as settled"

Gardiner warns, however, that "the organs actually placed in the jars bearing the names, and in later times also displaying the heads of the four children of Horus, are said to show great variation in the early period, though further material and closer investigation are re-



quired'. But in mummies of the 21st Dynasty, an age when the internal organs were returned to the body separately wrapped with the appropriate wax statuette of the four gods, Elliot Smith (M.I.E., IV, 35ff) found the liver associated with Imseti.

Pictorial evidence, though of little weight in the opinion of Gardiner, may be mentioned here. In two scenes of Ka-pw-Re's tomb (Mariette Mastabas, D 39, 274-277), an object shaped like a liver is brought by men requested to bring *mist* and *nmsm*. In addition, an organ vaguely resembling a liver or a spleen is sometimes used as a determinative of both *mist* and *nmsm* (Gardiner, Onom. II, 249).

*Mist*, similarly, occurs in many lists of offerings, e.g. the Pyramid texts, where the offering of pieces of butchery is accompanied by prescribed gestures:

Pyr. 82 (Mercer p. 44): "To say four times; for N. a lifting up of the offerings, four times. One pot of roast. One *mist*, one spleen one breast of meat".

Pyr. 82 (Mercer p. 45): "To say four times; for N., a lifting up of the offerings, four times. One liver.

Pyr. 82 (Mercer p. 44): "To say four times; for N. a lifting up of the offering, four times. Two pots of liver".

#### Lore of the liver

The above quoted texts and pictures show the liver as the seat of a god, as the object of its protection, or as a desired offering. This prerogative was shared by miscellaneous body-parts; but, in addition, the liver enjoyed with a few other viscera a prime position since it was granted eternity in the Canopic jars where it was under the aegis of one of the four sons of Horus. Its special importance is stressed in many therapeutic incantations:

"O jubilation, jubilation, take not this heart nor this, my breast to Sekhmet. Take not my liver to Osiris, in order that the hidden things that are in Buto may not, shall not enter into my seat on the morning of counting the Horus eye "(Sm.XIX, 4, pp. 502, 503)."

"As for that box of acacia-wood that carries Komet of the necropolis (concerning) which they know not how to pronounce the name of what is in it, the heart and the liver and the spleen and the ..... *mnd* (?*mndr*) (1) "(Ch. B. VIII, 4, 10).

There is much less agreement on the Egyptian word for gall-bladder. Dawson (JEA, 1932, 18. 15 a) conjectured that it was *mndr* but this identification is much doubted by Grapow's group (VII.I 376),

1. see hereunder : Gardiner, Onom., I, p. 18

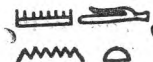

by Ebbell, who translated this word 'brain' (Eb. 766), and by Lefebvre (Essai, p. 72, n.1) who followed Iversen (JEA, 1947, 33 : p. 47) and Chassinat (Pap. Méd. Copte, 212-215) in identifying *mndr* with brain, an identification supported by a parallel recipe in the Coptic papyrus (loc. cit.). Naville calls *mndr* "un nom inconnu" unless it is a variant of *mnd*.



In addition, Lefebvre (Tableau, p. 34) suggested *wdd* as meaning gall-bladder as well as bile.

Gardiner (Onom. I, p. 18) summarizes thus the position:

"*mndr*, mentioned among viscera, both of man and animals. The position here immediately after 'spleen' and 'liver' and just before 'heart' (2) is clearly not fortuitous since in Naville (Litanie du Soleil 14, 36-20, 41 = 32, 33) we find enumeration 'liver, spleen, lung, *mndr*, and intestines, and when in p. Chester Beatty VIII, vs. 4, 10, 'heart, lung,

*pru uæpds*  were found in that order, Faulkner was probably right in conjecturing (Text, p. 73, n. 6) that this is not the *mnd* familiar elsewhere as part of the face (Wb. II, 93, 10) but a writing of *mndr*. P. Ebers 91, 11 (= 766) recommends *mndr* of a goat as the ingredient of a drug and 101, 7-8 (= 855 l) speaks of finding something in (i.e. the core of ?) a cyst like the *mndr* of a mouse. Ostr. Gard. 156 mentions *mndr* twice in its account of the parts of an ox; in 1.16 we again find it in close association with lung, heart, liver, spleen, and intestines (11. 11-15) and as a single organ; the previous reference (1.9) is in a very obscure gloss. Dawson first conjectured that *mndr* was an alternative word for  *r-ib* 'stomach'

but he later hazarded the guess that it indicated rather the 'gall-bladder'; in form it appears to be a derivative of *ndr* 'to catch of', 'to secure'."

For bile, two words are proposed with an identical meaning *wdd*: (Dawson, ZAS, 1927, 62, p. 21) and *buf* (Dawson, JEA, 1933, 19, 36 and Lefebvre, Tableau, p. 34 and Essai, p. 13, n. 1).

**Anatomy.** There are two paragraphs dealing anatomically with the liver. Eb. 854 1: There are four vessels going to the liver; it is they that give it water and air, and it is they that cause afterwards all diseases to arise in it by overfilling it with blood."

Eb. 855 d: As to debility (3d) that has arisen in the heart. This means its bulging out (h3sf translated 'Auswölbung' by Grapow, IV, I, p.6) right to the borders of the lung and liver. There happens thereby (to the patient? to the heart?) that its vessels are deaf (or numb?)

2. Cf. Eb. 855 d hereunder on the relation of the liver to the heart and lung



because they have fallen down (or become inefficient) <sup>(3)</sup> as a consequence of their heat.

In these two passages, several notions are discernible of which most important are that the vessels to the liver are four and that they carry liquid and air.

1. It may be noted that the word *metw* usually translated 'vessels' defines not only arteries and veins but, as well, all manner of ducts and canals. The Egyptian priest-physician certainly knew the external appearance of the liver since he extracted it during embalming. He could not have failed to notice the structures in the porta hepatis that comprise the portal vein, the common bile duct, and the two branches of the hepatic artery. The four *metw* could well have been these structures.

2. Post-mortem, arteries are empty and veins are full. This was also noticed by the Greeks who believed arteries to contain 'pneuma' or 'air', and derived the word artery from air. This explains the statement that the *metw* carry air to the liver.

3. Although blood is not specifically mentioned among the substances carried by the four *metw*, it may be surmised from the rest of the first quotation that states that the *metw* cause disease to arise in the liver by overfilling it with blood.

4. The neighbourhood relationship of heart, liver, and lung is recognized in Eb. 855 d. The rest of this paragraph is not clear. It may mean that the patient faints owing to weakness of the heart, since the relation of the heart to the pulsations in the *metw* was recognized (Eb. 854 a : "the heart speaks in all the *metw*").

**Liver pathology.** One would have expected to find many reports of naked-eye lesions in the large number of livers removed during embalming. Surprisingly, no such description is recorded in any medical or lay text of the period, and only one liver among the large number examined by Ruffer (1921 p. 16) was found to be diseased. Yet, it is difficult to believe in such a rarity.

In several tombs at Saqqara but principally in Mehu's, many individuals are depicted with abdominal distension and umbilical or scrotal herniae. Other persons in Mehu's tomb exhibit gynaecomastia or hyperplasia of the genital tissues. Ghalioungui (ZAS, 1962, 87, 11, 108 and The House of Life, 1973, pp. 86-88) expressed the opinion that these were, very likely, pictures of schistosomiasis with its hepatic complications.

3. or : There happens to him thereby (or insensibility?), his vessels have fallen (Grapow, IV 1, p. 6).

The existence of schistosomiasis in Ancient Egypt was proved beyond doubt by Ruffer (1921 p. 18) who also described a 'fibrotic' liver without giving further detail. Considering the present day endemicity of schistosomiasis in the region of the Nile valley of which Saqqara was the necropolis, this explanation is quite plausible. Ghalioungui also made the avowedly very speculative guess that Amenophis IV, if he really resembled his effigies, could have suffered from the same disease (The House of Life, p. 61).

With due reservations as to the value of present day translations, case 201 of the Ebers papyrus that Ebbell thought he could recognize as 'uraemic cramp with dropsy', might be a case of hepatic encephalopathy with anasarca :

If thou examinest an obstacle in his cardia, and findest him very dropsical, then thou shalt say of him : it is an obstacle and cramp which thou shalt break; it is like epilepsy which has attached itself in the belly. Thou shalt prepare for him (treatment) so that thou breakest this case of cramp.

Hepatic encephalopathy is usually fatal unless very modern therapies are applied. The rather optimistic result of the proposed treatment, rush-nut, beer, and three unknown substances, speaks against this identification. Moreover, Grapow (IV, 2, 88) criticized Ebbell's translation saying that it rests on the interpretation of *dhrt* as 'dropsy', for which there is no basis. Grapow further translated *dhrt* as 'extraordinarily painful', literally 'bitter'.

Another interpretation, associating the notions of 'breakable obstacle', cramp, epilepsy attached to the belly, might be cholelithiasis and biliary colic. Gall-stones have been found in mummies both at autopsy (Ruffer 1921) and by X-ray examination (Gray, 1967).

A whole section of the Ebers papyrus deals with affections of the cardia and stomach that are variously designated as 'obstacle', 'illness', 'resistance', 'affection', or 'suffering' (Eb. 188 to 208). These have been discussed by Grapow and his group (II, 35, 36, 117, 118). Of these a few are explicitly designated as 'liver cases', while others may be interpreted as infective or amoebic hepatitis, cholelithiasis, cirrhosis, or cancer of the liver. A few merit discussion.

The two in which liver disease is specifically mentioned are :

1. The already mentioned Eb. 854 1 that states that vessels cause all diseases to arise in the liver by overfilling it with blood.

4. nsy. t; but von Deines and Westendorf (VII, 1, 481) interpret it as an occult agency believed to invade the body and cause obstruction or get attached to the belly (Eb. 201, 209) or to eyes (Eb. 751).

2. Eb. 188 : «If thou examinest a man for an obstacle in his cardia and he is miserable to go, like a man suffering from burning in the anus, then thou shalt examine him lying extended on his back. If thou findest his belly warm and a resistance in his cardia, thou shalt say to him : *it is a liver case* (italics ours)...If after (emptying his belly with laxatives) thou findest the two sites of his belly : the right one warm and the left one cool, then thou shalt say about that : it shows that the disease *mht*, is consmed. Thou shalt again examine him; if thou findest his entire belly cool, thou shalt say : his liver is opened and is *nd3 nd3* therewith; he has received the remedy (i.e. it has operated).

The first of these two sections obviously mentions a congestive liver state. The second concerns an inflammation or a congestion localized, after evacuation, to the right hypochondrium and, later, completely resolved (biliary colic ? cholecystitis ? passive congestion?). One is also free to speculate on the meaning of burning of the anus and whether it refers to piles.

3. Jaundice has been surmised by Ebbell (Eb. p 40) to be the subject of Eb. 477-481, although the yellow colouration of the skin is not mentioned. The text reads 'treat the liver' but, as liver affections are mentioned elsewhere in the papyrus, and as these five prescriptions occur among dermatological recipes, Ebbell thought there was every reason to believe that no internal affection of the liver was meant but jaundice. This view appears confirmed by the listing of jaundice in a Coptic medical fragment amongst diseases of the skin, but it supposes that it was recognized as being due to derangement of the liver. The various drugs presented in the afore-mentioned Eb. 477-481 include :

Figs, sebesten, *sspt* of grapes, fruit of sycamore, fruit of *h3sy.t.*, gum, frankincense, *smt*, raisin, pignon, *kw*, leaves of lotus, wines, powder of zizyphus, milk, fruit of juniper, sweet beer, *inst*, *d3rt*, and *sy3* from Upper Egypt.

Three other case-histories may relate to liver disease though this is not clearly expressed :

a) Eb. 189 : «...all his limbs are heavy...then thou shalt put thy hand over his cardia; if thou findest his cardia drumming and it is going and coming under thy fingers...»

Tympanites is here associated with either visible peristalsis, or gastric splash, or shifting dulness. If the last it meant, cirrhosis is a serious possibility.

b) Eb. 198 : «If thou examinest his obstacle in his cardia, and thou findest that he has been changed (?) and has turned deathly pale (?)

(literally, has crossed the channel to the beyond), his mind goes away (?) and his cardia is dry (thirst)...it is a blood-nest which has not yet attached itself; thou shalt let it descend by means of remedies (treatment mentioned). There comes in his case from his mouth or from his anus like pig's blood, after it is fried...»

This case calls for longer comment. Grapow (IV,2,86) remarked, in the first place, that the word for obstacle is here determined by a piece of flesh. This being the single known instance of this writing, the obstacle must here be seen as a body-part. In the second place, 'crossing the channel' an expression borrowed from the nautical vocabulary may also mean "to obstruct the channel".

The whole description may, therefore, mean that a fleshy obstacle has caused pallor, intense thirst, and faintness followed by haematemesis and melaena. This combination may occur in gastric cancer or ulcer, or in cirrhosis.

c) The third (Eb. 203) deals with an affection of the cardia found, by palpation, to have attached itself to the right side. Grapow (IV,2,89) interpreted it as a liver affection, the Egyptians being, according to him, in the habit of linking pathological states of the right half of the abdomen with the liver.

#### Therapeutic uses of liver and bile :

There are 5 prescriptions of liver in the medical literature. Two concern a disease *s3w* or *s3rw* interpreted as night-blindness :

Eb.351 : «Another for 'night-blindness' in the eyes : liver of ox, roasted and crushed out, is given to it. Really excellent».

L. 35 : «Another remedy : ox liver on a fire of wheat or barley straw and smoked in its fumes. The liquid will be pressed on the eyes».

The interpretation of *s3w* and *s3rw*, probably two variants of the same word, as night-blindness rests on the fact that Dioscorides (II, 45) as well as other Greek and Arab writers (Avicenna, Canon, lib. III, p. 141) applied the same therapy to night-blindness (Ebbell. ZAS, 1924 59 : 57; Lefebvre, Essai, 84; Grapow IV,1,49).

#### The third prescription of liver summarily states :

Eb. 267 Another remedy for somebody suffering from *hn 'w in* his urine : ox-liver, *inst*, is shaped into p't cake and eaten by the man»

#### The fourth is a cosmetic preparation :

H. 10 : 9 = 148 : «Another (for preventing greying of hair) : ass's liver placed in a *d3d3* jar so that it rots; cooked, added to oil or fat, anointed herewith».

K.1 : «Treatment for a woman (whose eyes ache?) who sees not (?) and (?) has pain in the neck. Thou shalt say as to it : it is *dejec-*



tiones uteri in oculis suis...Fumigate her on incense and fresh fat; suffi vulvam ejus; fumigate her eyes with the shanks of the legs of bee-eaters (merops) : thou shalt make her eat the liver of an ass. raw».

**Bile**, exclusively in external applications, was much more widely used. In one instance, human bile is mentioned (Eb. 392). As this could not be easily obtained by any imaginable means, Dawson (ZAS, 1927, 62, p. 22), proposed to read it 'pork bile', an error of the scribe that might be due to an understandable confusion between *rmt* (man) and *rri* (pork) in Egyptian writing.

This is the prescription : «Another remedy for an eye in which all evil things have arisen : men's gall is divided in two parts; half of it is put into honey and the eye is anointed therewith in the evening; the other half is dried, ground fine, and the eye is anointed therewith in the morning (Eb. 392).

Four other passages also prescribe bile for eye conditions :

**Trichiasis** (Eb.428) : «Another for not letting hair grow in the eye after it has been pulled out : gall of a *wy3.t* bird, a straw is moistened therewith and applied to this place of the hair after it has been pulled out».

**Trachoma? Ectropion?** (Eb.350) : «Another to expel trachoma(5) in the eyes : gall of tortoise, ladanum, are put into the eyes».

**Leucoma** (Eb. 347, 360). These last prescriptions, that strike a curiously Biblical note, are the most spectacular of the four :

**Eb.347** : «Another to expel white spots in the eyes : gall of tortoise, honey...

**Eb.360** adds a magic spell : «Another to expel white spots in the eyes : It is thundering in the southern sky since the evening, there is rough weather in the northern sky, as corpses fell into the water, and Re's crew were landing at their shore, because the heads fell into the water. Who shall bring them? (Who shall) find them? I shall bring them, I shall find them. I have brought your heads, I have attached (them to) your necks, I have fastened your cut-off (heads) in their place. I have brought you (i.e. Re's crew) to expel (afflictions caused) by a god, by a dead man or woman, etc.

Is recited over gall of tortoise (which) is pounded with honey and applied to the lids».

5. Ebbell's translation of *nh3.t*. Grapow accepted it as probable (IV, 2,54) but Ebers and Maspero apparently wrongly thought it to have meant ectropion (see Lefebvre, Essai, p. 75, n. 1).

This is identical with the prescription that the angel advised Tobit to apply to his father's eyes (Tobit, 6,8 and 11,12). This book is believed by some exegetists to be apocryphal. But it dates back to the 3rd or 4th century B.C. when Egyptian traditions were still alive. The Egyptian connection is further confirmed by the rest of Tobit's story, for when the demon who took the lives of the previous husbands of Tobit's daughter-in-law Sarah ran away from the smokes of the fish heart and liver, he fled to the remotest part of Egypt (Tobit, 8). This treatment of leucoma achieved long-standing success for we find it mentioned by Dioscorides (II,96), Avicenna (Canon, lib. V,12) and other Arab physicians.

Otherwise, bile was recommended for miscellaneous conditions :

**Ber. 200** (vs.2,6--12 and 6,11,17) : «A remedy to dissipate heaviness in the ear : ink, terebinth, celery, offering bread(?), ox bile. Mix into a ball, and put it into the ear.

**Eb. 810** for a diseased breast : calamine (?), ox-bile, fly's dirt, yellow ochre, mixed, and the breast is rubbed therewith.

**Eb. 433** : «A remedy for a human bite : frankincense, yellow ochre, goat-gall, mixed. Bandaged therewith».

### Summary and Conclusions

The Ancient Egyptian words for liver, bile and gall-bladder are discussed. There is fair agreement on the names of the first two. The third is debatable.

The occurrence of these words in medical and magic texts is reviewed. With reservations, due to the scarcity and nature of available texts, the anatomical, physiological and magic notions attached to the three are analysed, and their therapeutic uses are enumerated.

The liver was considered an important organ but no definition of its assumed role in the economy of the body is possible, although its relation to jaundice might have been known.

There is no evidence that hepatoscopy was ever practised in Egypt.

### Abbreviations

- Ch. B. Chester Beatty Papyri, Jonckheere, F., 1947, Hieratic Papyri in the British Museum, Brussels : Fond. Egyptol. Reine Elisabeth
- Ber. The Berlin Papyrus, Wreszinski, W., 1909, Leipzig, Hinrichs.
- Eb. The Ebers Papyrus, transl. by Ebbell, B., 1937, Oxford University Press.

H. The Hearst Papyrus, Wreszinski, 1912, Der Londoner Medizin.  
Papyrus, und der Papyrus Hearst, Leipzig, Hinrichs.

L. The London Papyrus, *ibid.*

Sm. The Edwin Smith Surgical Papyrus, 1930, Chicago University  
Press

Wb. Wörterbuch der Aegyptische Sprache, Erman and Grapow.

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#### GESETZE DES KOSMOS AEGYPTISCHE ZEITRECHNUNG VON

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Es ist nicht gestattet, diese Schrift, in jeglicher  
Form, ohne Einverständnis des Autors zu verwenden.

#### Gesetze des Kosmos

Das Wissen der Menschheit um diese Gesetze in den letzten 3000  
Jahrn.

Bauten wie : Der Steinring von Stonehenge beim Salisbury in Eng-  
land, die Externsteine im Teutoburger Wald, wie auch  
die Steinkreise bei Oshoro in Japan und auf Yezo in  
Japan, wie auch das Medizinrad von Wyoming in Norda-  
merika zeigen uns, dass unsere Vorfahren genaue  
Kenntnisse über die Himmelskörper und die Vorgänge  
am Sternenhimmel gehabt haben.

Bei Stonehenge versammelt sich auch jetzt noch das Volk am 21. Juni  
in dem Steinring.

Nach wissenschaftlichen Forschungen liegen mehrere Steine, besonders  
der astronomische Stein im Innern des Ringes und der grosse Fels  
auss erhalbso, dass sie die Richtung nach dem Ausgangspunkt zur  
Zeit der Sommersonnenwende anzeigen.

In der Gipfelkammer der Externsteine bei Detmold im Teutoburger  
Wald ist ein Fenster, das als eine Art Beobachtungsvisier gelten kann,  
durch das die Sonne beim Aufgang am Tage der Sommersonnenwende,  
den Schatten eines Stabes (Gnomon) auf die gegenüberliegende Wand  
nach einer bestimmten Stelle wirft.

Das Wissen der Nordischen Völker zeigt sich in den Felsbildern von  
Bohuslän bei Oslo und den Runenkalendern, die sich in Form von  
Runenstäbchen bis heute erhalten haben.

Der Sonnentempel in Peru im alten Inkareich und die Pyramiden von  
Gizeh in Ägypten zeugen von dem hohen astronomischen Wissen der  
Alten. Die Pyramiden sind genau in der Mittagslinie ausgerichtet.



Astronomie ist die Lehre, oder die Kunde von den Sternegesetzen  
griechisch = astèr = Stern  
nomos = das Gesetz

Astrologie = logos = Botschaft von den Sternen

Der Monat wurde in 6 Wochen zu je 5 Tagen eingeteilt.

Die Griechen rechneten den Monat, (das hatten sie von den Aegyptern)  
zu drei Wochen mit je 10 Tagen.

Aus Tontafeln des Assyrikerkönigs Assurbanipal (um 650 v. Chr.) in  
Ninive, wissen wir u.a., dass die Mesopotamier sehr genaue Kennt-  
nisse des Himmels hatten. Sie berechneten sogar Sonnen- und Mond-  
finsternisse.

#### Die Woche der Römer :

- |                         |   |
|-------------------------|---|
| 1. Tag = Tag der Sonne  | = in Germanien = Sonntag                |
| 2. Tag — Tag des Mondes | = « = Montag                            |
| 3. Tag = Tag des Mars   | = Dienstag = Tag des Ziu-Tys od. Tyr    |
| 4. Tag = Tag des Merkur | = Mittwoch = Tag des Odin (dan. Onsdag) |
| 5. Tag = des Jupiter    | = Donnerstag = Thor, (holl. Donderdag)  |
| 6. Tag = Tag der Venus  | = Freitag = Tag der Freya Donar)        |
| 7. Tag = Tag des Saturn | = Samstag = Saturnsdag (Sabatt Tag)     |

#### Gesetze des Kosmos

Thales von Milet (624 — 543 v. Chr.) lehrte :

Die Erde sei eine Scheibe, die Erde sei nicht nur von Ozeanen umgeben, nein, auch unter der Erde befinde sich Wasser, sodass die Erde auf dem Wasser schwimme.

Auch oberhalb des Himmelsgewölbes befinde sich Wasser.

Deshalb war nach dieser Lehre Wasser der Urstoff aller Dinge.

Anaxymandros (610 — 547 v. Chr.) der Schüler des Thales v. Milet, nahm an, dass die Erde eine Kugel sei.

Pythagoras (582 — 507 v. Chr. ca.) aus Samos lehrte :

Die Zahl regiert die Harmonie des gesamten Weltgeschehens.

Die 10 gilt als vollkommene Zahl (von den Aegyptern übernommen).

Philolaos (ca. 450 v. Chr.) baut nach dieser Zahl 10 sein Weltgebilde auf :

- |           |                       |
|-----------|-----------------------|
| 1. Sonne  | 6. Jupiter            |
| 2. Mond   | 7. Saturn             |
| 3. Merkur | 8. Der Fixsternhimmel |
| 4. Venus  | 9. Erde               |
| 5. Mars   | 10. Gegenerde         |

Die Erde ist nach seiner Lehre nur auf der einen Seite bewohnbar, die Seite, die nach dem Zentralfeuer liegt, ist infolge der ausströmenden Hitze nicht bewohnbar.

Aristoteles (384 — 322 v. Chr.) verwarf dieses Weltbild und lehrte : Die Erde schwebe als Kugel im Mittelpunkt der Welt. Gegenerde und Zentralfeuer lehnt er ab, sonst aber behielt er die Lehre des Philolaos im wesentlichen bei.

Die Schule in Alexandrien, durch Ptolomäus Soter gegründet, liess alle orientalischen Bücher ins Griechische übersetzen.

Der Bibliothekar von Alexandrien bestimmte die Grösse der Erdkugel, mit annähernd richtigen Werten, er übernahm dieses Wissen aus uralten Büchern aus seiner Bibliothek.

Hiparch (190 — 120 v. Chr.) auf der Insel Rhodos, stellte den für uns ersten Katalog von Sternen her.

Der Katalog enthielt genaue Lageangaben über 1080 Fixsterne, die er durch eigene Beobachtungen bestimmte.

Auf seinen Arbeiten fusste : Claudius Ptolomäus (ca. 140 n. Chr.), der in Alexandrien in Agypten lehrte.

Sein Werk ist uns in arabisch überliefert :

Tabrir al mäghesti = Das grosse Buch.

Dieses Buch ist heute unter dem Begriff — Almagest — bekannt.

Ein Schüler von Plato : Heraklides aus Herakleia am Schwarzen Meer (ca. 250 v. Chr.) lehrte schon : Die Sonne sei der Mittelpunkt allen Geschehens.

Der Kalif von Bagdad : Al Mamun (786 — 833 n. Chr.), ein Sohn des Harun Al Raschid, liess die Schriften ins Arabische übersetzen, wodurch wir erst zur Kenntnis des Ptolomäischen Werkes kamen.

Die Bibliothek von Alexandrien wurde mehrfach verbrannt :

1. Durch Caesar 47 v. Chr.

2. Durch den christlichen Fanatiker Patriarch Theophilus, der 390 n. Chr. veranlasste, heidnische wissenschaftliche Werke zu verbrennen.

3. Durch die Eroberung Alexandriens durch die Araber im Jahre 642 n. Chr.

Ulugh Beigh, ein Mongolenfürst (1394 — 1449 n. Chr.) hatte in Samarkand im Iran, eine Sternwarte errichten lassen und alle Sterne aus dem Verzeichnis des Hipparch von neuem beobachten lassen.

So stand auch Alfons von Kastilien (1226 — 1284 n. Chr.) unter dem Einfluss der arabischen Wissenschaft. Er liess im Jahre 1252 n. Chr. genaue Tafeln berechnen, nach denen der Lauf der Sonne, des Mondes und der Planeten berechnet werden konnte.

Daraufhin wurde er wegen Gotteslästerung angeklagt und entthront.

**Nikolaus Kopernikus** (1473 — 1543 n. Chr.)

Kopernikus lehrte : Die Sonne steht im Mittelpunkt des Alls.

**Johannes Keppler** (1572 — 1630 n. Chr.)

Er war Mitarbeiter des Tycho Brahe (1546 — 1601). n.chr.)

Keppler stellte die Bewegungsgesetze der Planeten auf.

1. Gesetz : Alle Planeten bewegen sich auf Ellipsen, in deren einem Brennpunkt die Sonne steht.

Erweiterung :

Zwei Himmelskörper bewegen sich nicht nur in Ellipsen, sondern in Kegelschnitten umeinander.

Das sind u.a. :

Der Kreis, die Hyperbel und die Parabel.

Es sind diés «ebene Schnitte» eines räumlichen Kegels.

2. Gesetz : Die Verbindungsstrecken Erde — Sonne, überstreicht in gleichen Zeiten, gleiche Flächen.

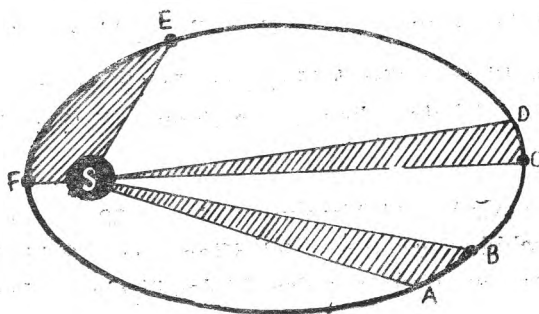


Abb. : Keplers Flächensatz : Die Verbindungslinie Sonne-Planet überstreicht in gleichen Zeitabschnitten gleiche Flächen.

3. Gesetz : Die Quadrate der Umlaufzeit der Planeten verhalten sich wie die Kuben (z.B. :  $2 \times 2 \times 2 = \text{Kubik}$ ), ihrer mittleren Entfernung von der Sonne.

Um die Wahrheit zu finden, wird hauptsächlich die induktive Methode angewandt. D.h. :

Vom Einzelnen auf das allgemein gültige Gesetz zu schliessen.

Man sollte jedoch auch die deduktive Methoden anwenden, d.h. :

Man sollte von den allgemeingültigen Gesetzen auf das Einzelne schliessen.

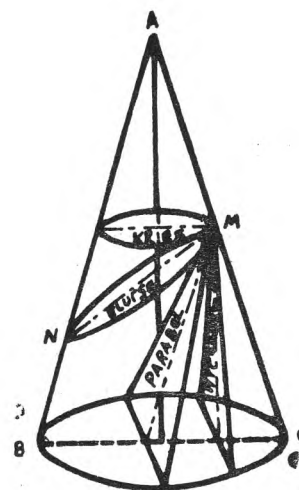


Abb. : Entstehung der Kegelschnitte als ebene Schnitte eines Kreiskegels

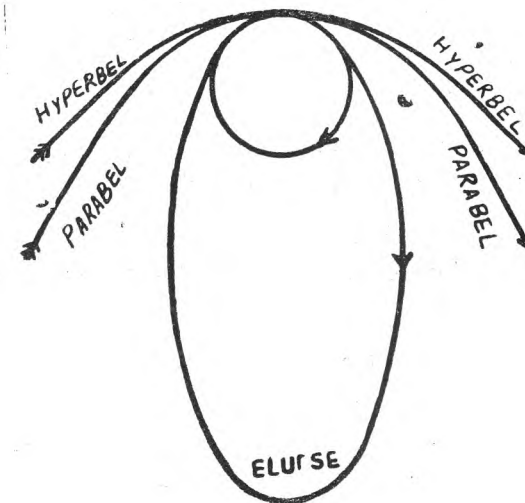


Abb : Die Kegelschnitte

Menschen aller Zeiten versuchen immer wieder, die Wahrheit zu finden. Was aber ist Wahrheit ?

Die Wahrheit ist das, was die jeweilige Gesellschaft als richtig erkannt hat, oder auch... und dies scheint mir öfter der Fall zu sein, Wahrheit ist das, was der jeweiligen Gesellschaft aufgezwungen wird.

Hier in dieser Schrift versuche ich nur, Ihnen eine Probe meiner Kenntnisse «Wahrheit» werden zu lassen.

Gesetze des Kosmos

**Isaac Newton** (1643 - 1727 n. Chr.)

Er fand die Ursache, die Himmelskörper zwingt, sich um die Sonne zu bewegen und diesen Lauf nach Keplerschen Gesetzen auszuführen.

Beobachtungen über fallende Körper zeigten ihm, dass, die Kraft, die den Mond zwingt, sich um die Erde zu bewegen, die gleiche Schwer-

kraft ist, wie die der Sonne, die einen Stein nach dem Erdboden hinfallen lässt.

1. Gesetz : Geschwindigkeit ist die Wegstrecke, die ein Körper in einer Sekunde zurücklegt.

Behält ein Körper dauernd diese Geschwindigkeit bei, so bewegt der Körper sich mit gleichförmiger Geschwindigkeit.

(Wie ein Eisenbahnzug auf der Strecke).

2. Gesetz : Wird der Körper gleichmässig schneller, d.h. die Geschwindigkeit nimmt zu, so nennt man diese Bewegung gleichmässig beschleunigt.

3. Gesetz : Beschleunigung ist der Zuwachs, den die Geschwindigkeit pro Sekunde erhält.

Isaac Newton fand, dass die Bewegung des Mondes um die Erde aus zwei Eigenbewegungen besteht.

- a) Eine gradlinige Bewegung, sie führt den Mond in einem bestimmten Zeitabschnitt von A nach B, in tangentialer Richtung.

(Tangente = Gerade, die mit einer Krümmen Linie (Kreis) oder Fläche, nur einen Punkt gemeinsam hat).

- b) Die zweite Bewegung ist eine Fallbewegung nach der Erde hin und führt den Mond in der selben Zeit von B nach C.

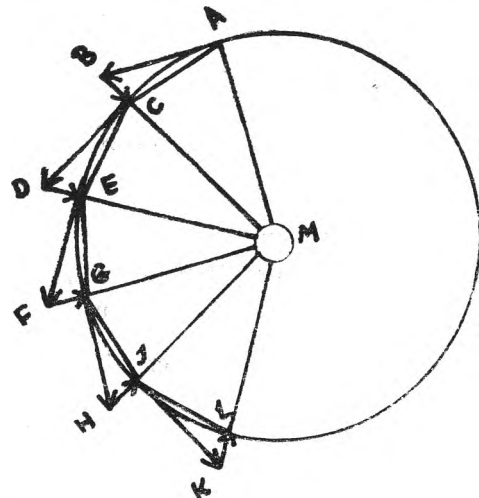


Abb. : Bewegung des Mondes um die Erde.

Die Gesetze Kosmos

In der Abbildung ist diese Bewegung eine gebrochene Linie.

Nimmt man aber die Zeitabschnitte, in der Bewegungen erfolgen immer kleiner, so werden die Abschnitte AB - CE immer kleiner und somit ergibt sich endlich die Kreisbahn.

Newton fand, dass die Fallbewegung des Mondes von B nach C oder von D nach E erfolgt, als ob ein Stein nach dem Erdmittelpunkt fallen würde.

Er nahm an : Dass ein Stein in doppelter Entfernung vom Erdmittelpunkt (da ja in dieser grösseren Entfernung die Erdschwere geringer geworden ist);

in der 1. Fallsekunde nicht etwa die Hälfte des Weges zurückgelegt hatte, sondern nur den 4. Teil ( $2 \times 2 = 4$ )

In dreifacher Entfernung nur den 9. Teil ( $3 \times 3 = 9$ )

Da der Mond 60mal so weit vom Erdmittelpunkt entfernt ist wie ein Punkt der Erdoberfläche, folgt daraus :

Dass in dieser grossen Entfernung die Fallbewegung eines Steines nicht den 60. Teil, sondern 3600. Teil ( $60 \times 60 = 3600$ ) von 5 Meter beträgt.

(5 mtr. = 500 cm = 5000 mm)

$5000 : 3600 = 1,38$  mm (Millimeter)

Genau aber mit dieser Fallgeschwindigkeit bewegt sich der Mond nach dem Mittelpunkt der Erde.

Gleichzeitig bewegt sich der Mond im Raum gradlinig, im Sinne der Bewegungen AB oder CD weiter.

#### Newtons Gravitationsgesetz :

Jeder Körper zieht jeden anderen Körper an, mit einer Kraft, die mit der Masse zunimmt, aber mit zunehmender Entfernung abnimmt und dem Quadrat der Entfernung.

D.h. :

Hat die Kraft in einer bestimmten Entfernung irgend eine bestimmte Grösse, so ist ihr Betrag in der dreifachen Entfernung nur der  $3 \times 3 = 9$ . Teil usw.,

in 10 facher Entfernung der  $10 \times 10 = 100$ . Teil.

Wie die Kraft beschaffen ist, war bis heute noch unbekannt, man kann sie genau bestimmen, konnte aber nicht angeben wie sie zustande kommt.

Im folgenden werde ich dies angeben.

Bis jetzt war nur bekannt, dass die kleinsten Stoffe die es im Raum gibt, nach allen Seiten diese Kraft ausbreiten.

Die Frage der Wissenschaft ist heute :

Welche Zeit braucht die Gravitationskraft, um sich von einem Punkt aus im Raum zu verbreiten?



## Die Gesetze des Kosmos

1. Der Schall braucht eine gewisse Zeit bei :  
Einer Luft von 20 Grad Celsius und 760 mm Druck = 343 mtr/sec.
2. In Wasser bei 21.5 Grad Celsius = 1484 mtr/sec.
3. In Eisen = 5000 mtr/sec.  
Bei den obigen Materialien braucht die Gravitationskraft obige Zeiten von Ort zu Ort.
4. Lichtgeschwindigkeit = 300 000 km/sec. braucht ein Lichtstrahl, um von einer Lichtquelle aus, sich im Raum in gradliniger Bahn fortzubewegen.

1 Lichtjahr = 9,5 Billionen km.

## Einsteins Relativitätstheorie

Die spezielle Relativitätstheorie sagt :

Die Naturgesetze in allen ruhenden und allen gleichförmigen gradlinig bewegten Systemen sind gleich.

Bis jetzt ist die höchste Geschwindigkeit eines materiellen Körpers die Lichtgeschwindigkeit :

300 000 km/sec.

Jeder gleichförmig, in gerader Richtung bewegte Massstab, ändert seine Länge, je nach der Geschwindigkeit seiner Bewegung.

Die Länge ist relativ, also abhängig von der Geschwindigkeit des Massstabes.

Je schneller dieser Massstab sich bewegt, um so mehr verkürzt er sich in der Bewegungsrichtung.

Auch die Zeit ist relativ, abhängig von der Geschwindigkeit.

Ein Zeitintervall in einem schnell bewegten Körper (z. B. Raumschiff) wird um so grösser, je schneller die Bewegung erfolgt.

Hier ist es gerade umgekehrt wie bei der Länge :

Die Länge eines Körpers wird geringer, ein Zeitintervall wird grösser.

Auch die Masse eines Körpers nimmt zu, bei höheren Geschwindigkeiten. Je schneller der Körper sich bewegt, desto grösser wird Masse (Gewicht)

Masse und Energie sind so eng miteinander verknüpft, dass die :  
$$\text{Masse} \times \text{dem Quadrat der Lichtgeschwindigkeit} = \text{Energie}$$
ist.

Einstein lehrt : Dass die Schwere und die Beschleunigung äquivalent (gleichbleibend) im Verhältnis ist.

## Die Gesetze des Kosmos

Der Raum in dem wir leben, ist nicht mehr dreidimensional (Länge  $\times$  Breite  $\times$  Höhe), sondern «gekrümmt».

Die Ergebnisse der geometrischen Messungen werden abhängig von den Gravitationsfeldern, in denen die Messungen ausgeführt werden.

Raum, Zeit und Materie werden zu einer untrennbaren Einheit verbunden.

## Die Perihelbewegung des Merkur.

Die Merkurbahn ist keine geschlossene Ellipse, sie dreht sich ganz allmählich um die Sonne herum. Diese Bahnverlagerung nennt man «Periheldrehung», weil sich das Perihel in jedem Jahr etwas verschiebt. In einem Jahrhundert ca. 40 Bogensekunden.

Es dauert 3 Mill. Jahre bis sich die Bahn einmal völlig gedreht hat, bis der Planet Merkur seine Rosettenbahn so durchlaufen hat, dass er die Ausgangsstellung wieder erreicht hat.

Auch wird das Licht im Schwerfeld der Sonne abgelenkt.

Ebenso verändert sich die Rotverschiebung der Spectrallinien im Schwerfeld.

## Hauptenergie (Geistenergie), die Energie des Kosmos

Hauptenergie, im folgenden Geistenergie genannt, existiert überall im Kosmos, sowohl in «festen-flüssigen», wie auch in den gasförmigen Körpern.

Diese Energie macht es möglich, die Materie oder den Stoff zu manifestieren (darzustellen).

Diese Energie sind Schwingungen, eine Kraft, die allen Raum durchdringt.

Geistenergie geht weder verloren, noch kann sie zerstört werden, auch wenn sie benutzt wird. Nur ihre Manifestation ändert sich.

In der Wissenschaft ist die Geistenergie auch als :

Adhäsion (Anziehungskraft), Kohäsion (das Zusammenhaften, Attraktion (Anziehungspunkte), Repulsion (Anziehungskraft) und auch Gravitationskraft (Schwerkraft) bekannt.

Das ist aber immer wieder die selbe Kraft.

So wie die Materie in ihrer Substanz nicht zerstört werden kann, so kann auch die «Geistenergie» nicht aufgebraucht werden.

Die Existenz eines Jeden Stoffes, sowie dessen Manifestation, (Darstellung), hängt von der Anzahl der Schwingungen ab, die jede Sekunde in den Körper hinein gehen und aus ihm austreten.

## Die Gesetze des Kosmos

Bis vor kurzem war es der Wissenschaft nur möglich, mit Hilfe der Kälte und der Wärme die Schwingungen im Stoff (der Materie) zu ändern.

Beispiel :

Stahl wird durch Erhitzen und rasches Abkühlen gehärtet. Durch diese Methode wird die Anzahl der Schwingungen im Metall erhöht und damit auch die Anziehungskraft ihrer Partikel.

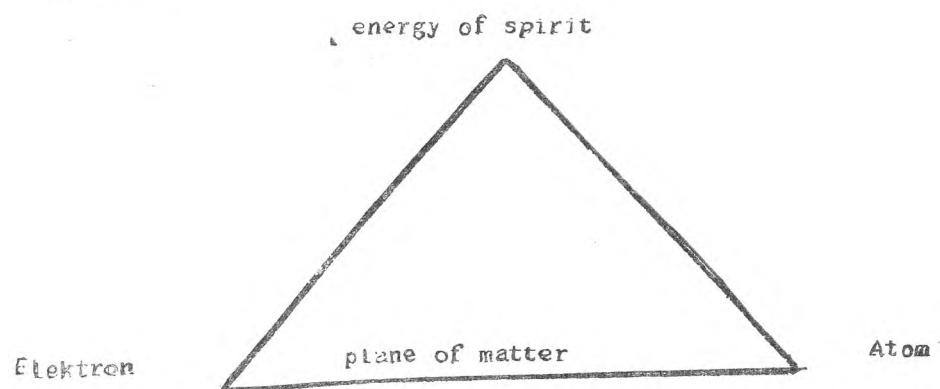
Die Verschiedenheit der Schwingungen der Geistenergie verursacht die verschiedenen Manifestationen.

Die Schwingungen dieser Geistenergie in den Stoffen, ermöglicht es, erst, die Existenz der Materie uns wahrnehmen zu lassen.

Wären diese Schwingungen nicht, wir könnten Materie irgendwelcher Art von der anderen nicht unterscheiden.

Das Gesetz :

Materie existiert nur durch die Substanz (oder Tr-äger) Geistenergie, es gibt keinen Stoff (Materie) ohne die Geistenergie.



Geistenergie-Schwingungen gelangen zur Erde, die die Manifestation des Atom und des Elektron bewirken.

Diese Geistenergie strömt von ihrem Ausgangspunkt :

Positive und negative Schwingungen aus, d.h. : Zweifache Polarität. Materie.

Die Materie besteht aus drei Elementen, in den festen, gasförmigen und in den flüssigen Körpern, die Grundelemente genannt werden.

Jedes dieser Elemente besteht aus einem stets gleichbleibenden Teil von : Vibrationen (Schwingungen).

Beispiel :

Das Holz erscheint vom Stein verschieden. Es ist es auch, aber die Verschiedenheit zeigt sich erst in der Manifestation.

In der Substanz ist kein Unterschied.

## Gesetze des Kosmos

In den Elementen jeder Materie wirkt das selbe Grundprinzip, das 'Geistenergie' genannt wird.

Somit ist das Grundprinzip aller Schöpfung : «Geistenergie.»

Beispiel :

Untersuchen wir einmal den Begriff Geistenergie.

Eine Blume ist nicht nur eine Blume durch ihr Farbe, Form Duft, oder das samtweiche Gefühl, das sie bei der Berührung vermittelt.

Nein, die Blume ist auch ein Gebilde von verschiedenartigen Schwingungen, die zu unserer Nase, den Augen und zu den Fingern gelangen. Bestimmte Wellenlängen des Lichtes, die von der Blume zurückgeworfen werden, vermitteln uns ihre Farbe, d.h., sie lassen in uns den Eindruck einer Farbe entstehen.

Diese Schwingungen veranlassen uns auch, die Formen der Blume wahrzunehmen.

Die von dem Öl der Blume ausgehenden Schwingungen, lösen in unserem Geruchsorgan ein «Duftempfinden» aus.

Befühlen wir die Blume, so rufen die Schwingungen ihrer Substanz die Empfindung des «samtweichen» hervor.

Gesetz :

Für uns existiert nur, was wir als Vibrationen wahrzunehmen vermögen.

Die Begriffe : Zeit — Raum — Geschwindigkeit — Entfernung — Beschleunigung

Immanuel Kant lehrt über Zeit und Raum :

.....Die Welt von Raum und Zeit ist nicht Wirklichkeit an sich selbst, sie ist aber keineswegs Schein, sondern : Raum und Zeit sind die Bedingungen der objektiven (sachlichen) Realität aller unserer sinnlichen Erfahrungen in der Anschauung.....

Der Begriff : Raum, wurde im Laufe der Entwicklung der Menschheit zu einem Problem des menschlichen Lebens, das überwunden werden muss. Das Wort Raum ist so verstofflicht worden, dass er für den Zeitbegriff des Menschen zu einem Hindernis geworden ist.

Der «Geist» an sich erscheint dem Menschen ebenfalls als eine stoffliche Qualität, mit deren Hilfe er das Problem Raum, zu überwinden hofft.

Der Mensch richtet seine Anstrengungen darauf, Zeit zu gewinnen, und den Raum zu überwinden.

Diese Ansicht aber, wird zu stofflich (materialistisch) gedacht, daher auch die sehr gross en Schwierigkeiten.

Versuchen wir doch einmal, diese beiden Begriffe : Raum und Zeit anders zu sehen.

#### Beispiel :

Zeit ist die Dauer des Bewusstseins (der Ablauf des Tages und der Nacht wird dem Menschen bewusst).

Dadurch entstehen : Perioden und Intervalle, die der Mensch benützt, um gewisse Dinge, Tatbestände oder Vorgänge, sich bewusst (verständlich) zu machen.

#### Raum : Eine Vorstellung

Der Raum wird von dem Menschen nach verschiedenen materiellen Massstäben gemessen, Wie : Zoll — Fuss — Schuh — Meter — usw.

Dies sind jedoch vom Menschen willkürlich geschaffene Mass-stäbe, die den Menschen zwingen, den Begriff :

Raum, nur in materieller Form oder Vorstellung zu sehen. Der Mensch kann sich folglich den Raum nicht mehr «unendlich» vorstellen.

Da der Mensch sich aber künstliche Mass-stäbe geschaffen hat, um damit den «Raum» zu messen, glaubt er, dass ein «endloser» Raum oder ein unmessbarer Raum nicht existieren kann.

Somit sind Raum und Zeit in der stofflichen objectiven Welt eine, eng miteinander verknüpfte Wirklichkeit.

Jetzt aber entsteht dadurch ein neuer Begriff : Die Entfernung.

#### Beispiel :

Der Mensch überwindet eine Entfernung von Punkt A zu Punkt B. Er ist sogar in der Lage, diese Entfernung mit den Augen abzuschätzen.

Benützt er aber ein Fernrohr...so ist sofort dieselbe Entfernung um etliches verkürzt.

Damit haben wir den Beweis, dass die Vorstellung :

Raum, Zeit, Entfernung, Geschwindigkeit und Beschleunigung relative, d.h. bedingt ist.

Der Zeit — und Raumbegriff, wie auch die anderen Begriffe, hängen somit von der Beziehung zu unserem «Bewusstsein» ab.

Der Mensch ist der 'Zeit' und des 'Raumes' bewusst.

Durch Wahrnehmungen, die stets individuell sind, und an die Funktionen der Sinne, wie :

Beschleunigung, Geschwindigkeit, Entfernung u.a. gebunden sind.

Durch die fünf Sinne seines Körpers : Sehen — Hören — Riechen — Fühlen — Schmecken, macht der Mensch Wahrnehmungen der Materie.

Dadurch aber wird der Mensch zwangsläufig Opfer der Täuschung und des Selbstbetruges.

Er wird zum Sklaven einer unzuverlässigen Methode der Begriffsbildung, die nur «relative» sein kann.

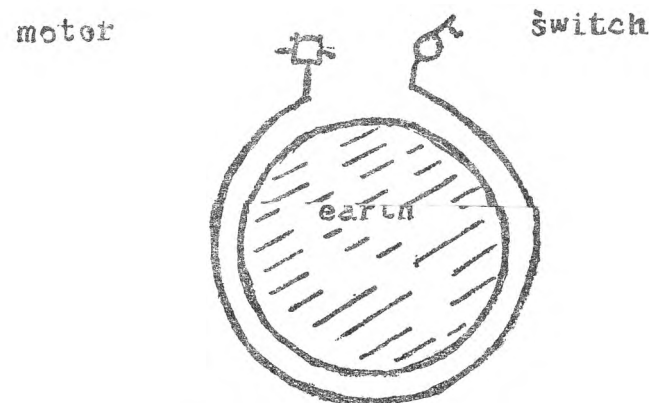
#### Schwerkraft (Gravitationskraft)

Die Wissenschaft stellt heute die grosse Frage :

Welche Zeit braucht die Gravitationskraft, um sich von einem Raum (Punkt) zum andern zu bewegen ?

Nehmen wir an, dass die Schwerkraft ein Element der Geistenergie selbst ist, so ergibt sich die Antwort auf diese Frage.

Die Geistenergie existiert überall, sie muss demnach nicht erst zu uns gelangen, sondern wir werden dauernd von den Schwingungen dieser Energie getroffen, diese Schwingungen sind in uns — um uns — und um herum.



Stellen wir uns vor, der Elektriker hätte eine Kabelleitung um die Erde herumgelegt, 40.000 km lang.

Vor uns steht ein Elektromotor mit einem Schalter. Von diesem Schalter geht die Kabelleitung wie gesagt, um die Erde herum, zu dem Motor.



Wenn der Schalter den Motor einschaltet, wie lange glauben Sie, braucht der Strom, um zu dem Motor zu kommen, um ihn anzutreiben? Sie haben recht, er läuft sofort.

Man kann deshalb nicht fragen : Wie lange dauert es, bis der Strom zu dem Motor kommt, denn die Elektronen befinden sich ja bereits in der Kabelleitung (Kupfer/Alu).

Diese Elektronen werden nur durch den Schalter in Bewegung gesetzt, mit einem «Druck» vergleichbar.

Dieser Druck besteht dann aber auf der ganzen Leitung und so werden die Elektronen «hier» wie «dort» sofort in Bewegung versetzt, und der Motor läuft deshalb sofort.

So etwa kann man sich das Wirken der Geistenergie vorstellen die das hier in diesem Falle die Gravitationskraft darstellt.

Diese Kraft oder Energie ist überall und gegenwärtig.

Das Licht selbst, oder die Schwingungen, die sich uns als 'Licht' erscheinen lassen, die eine Geschwindigkeit von :

ca. 300.000 km/sec haben, sind nur eine von vielen der Manifestationen dieser Geistenergie. Alle Stoffe, die der Mensch durch seine 5 Sinne wahrnimmt, sind eine Manifestation d. Geistenergie.

### Zeitdilatation (Zeitdehnung)

Der grosse Philosoph Immanuel Kant 1724 — 1804 n. Chr.) lehrt über Raum und Zeit folgendes :

Zeit ist nichts anderes als die Form unseres inneren Sinnes, d.h. :

Der «Intuition» des Selbst und unseres inneren Zustandes.

Zeit kann nicht irgendeine Determination (nähere Bestimmung) von Phänomenen (Erscheinungen) aussserhalb des Menschen sein.

Die Zeit hat weder mit äusseren Formen, noch mit einem Stand-  
zu tun, im Gegenteil, die Zeit determiniert die Beziehungen von unseren Vorstellungsbildern in unserem Innern.

Die Welt von Raum und Zeit ist nicht die Wirklichkeit an sich selbst, sie ist aber auch keineswegs Schein, sondern Raum und Zeit, sind die Bedingungen der objektiven (sachlichen) Realität, aller unserer sinnlichen Erfahrungen in der Anschauung.

Man erkennt :

Kant spricht von «Intuition» unseres Selbst und unseres inneren Zustandes.

### Beispiel :

Der Mensch erwartet irgend ein Ereignis wie :

Urlaub steht in Aussicht, oder ein Treffen, eine Verabredung mit einem Freund oder einer Freundin u.a.

Der Mensch freut sich im voraus auf die kommende Zeit, damit aber verändert sich sein innerer Zustand, er wird durch seine Vorstellungskraft erregt.

Der Mensch stellt fest : Die Zeit will und will nicht nicht herumgehen bis zu dem Zeitpunkt X.

Ist der Zeitpunkt X dann erreicht, so merkt er, er ist sich der Länge der Zeit erst gar nicht bewusst geworden, Dank seines inneren Zustandes.

Kant spricht von «Intuitionen», was ist das ?

Intuition ist ein plötzliches Aufleuchten, ein Erkennen oder Bewusst werden» von Zusammenhängen, die in einer Art von geistiger Schau bewusst werden.

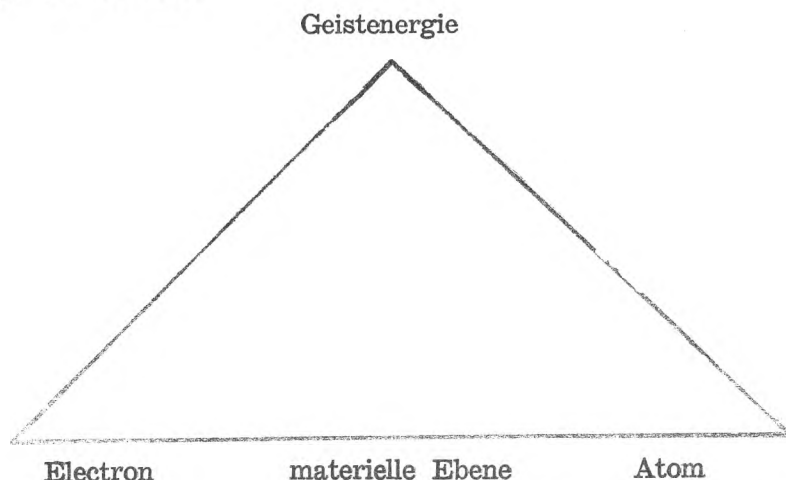
Dieses «Bewusstwerden» steht meistens auch in Verbindung mit einer Bemühung dieses «Bewusstsein», das Meditation genannt werden kann.

Diese innere Versenkung bewirkt die «bewusste Erfahrung» der Wirklichkeit, oder dessen, was der Mensch als «Realität» begreift.

Intuition ist demnach «Eingebung» Z.B. auf eine Frage, um sich der Antwort bewusst zu werden.

### Der Mensch hat zwei Bewusstsein :

1. Das äussere Bewusstsein, oder auch das materielle genannt, dessen er sich durch seine fünf Sinne (Sehen, Hören, Richten, Schmecken, Fühlen) bewusst wird.
2. Das innere Bewusstsein, auch das «Unterbewusstsein» genannt. Dieses Unterbewusstsein ist nicht materiell und somit dem Menschen nicht durch seine fünf Sinne begreifbar.



Betrachten wir das vorliegende Bild, so sehen wir, wiederum sind es drei Elemente, aus 2 mach 3, ein Gesetz, ein Hauptgesetz des Kosmos.

Diesses Gesetz lässt sich auch in Zahlen ausdrücken, wie alle Gesetze, denn Pythagoras lehrt uns doch : (um 582 — 507 v. Chr.) :

Die ewige Gesetzmässigkeit der Zahl, ist das eigentlich göttliche Prinzip des Universums, des Himmels und der Natur.....

Er lehrt uns auch :

Die Zahl ist das Werkzeug der Gerechtigkeit, in der Hand des Schöpfers.

Der Mensch kann mit der Kraft, dem «Unterbewusstsein» umgehen. **Erkann die Kraft nur kaum beschreiben, weil diese Kraft ihm, sein Menschen nicht bewusst wird.**

Diese Erfahrung macht der Mensch auch oft im «materiellen» Bereich.

**Beispiel : ...**

Ein Elektriker verlegt ein Kabel für eine Lichtschaltung z.B. (Wechsel — oder Kreuzschaltung) u.a.

Ein Grossteil der Handwerker weis aus 'Erfahrung' ganz genau, wie diese Schaltung herzustellen ist, um funktionsfähig zu sein. Erklären aber, wie das rein elektrotechnisch funktioniert, das können nicht alle.

Auch die «Zeitdilatation» wird dem Menschen «bewusst» werden, mit Hilfe der Hypnose.

Das ist aber ein Hilfsmittel, und ohne ein Hilfsmittel wird es dem Menschen kaum möglich sein, sich die nicht materiellen Manifestation der Geistenergie «bewusst» zu machen.

Ein Arzt hypnotisiert ein Medium und dieses Medium versetzt der Arzt zeitlich zurück d.h. :

Er lässt das Medium jünger werden (natürlich nur geistig), bis zum Embryo und weiter zurück.....danach kommt das vergangene ältere Leben des Mediums, vom Alter wieder beginnend bis zum Embryo usw. Der Arzt lässt demnach in der Hypnose das Leben des Mediums zurückspulen. Der Körper, das «Materielle», liegt vor ihm, das Unterbewusstsein des Mediums aber, berichtet von vergangenen Zeiten.

Die Zeit wird demnach gedehnt und der materielle Mensch kann diese Zeitdilatation mittels des Hilfsmittel : Medium «bewusst» machen, d.h. : Materiell also für den Menschen mit seinen fünf Sinnen, wahrnehmbar machen.

Dieses «Bewusstsein» vom Unterbewusstsein zum «äusseren Bewusstsein» könnte man auch :

**Die 4. Dimension nennen.**

**Die Verwendung des Cyklus der 60 und seine Geschichte.**

zunächst arbeiten wir heute alle mit dem Cyklus der 60, ohne dass dies uns besonders bewusst wird. Nämlich mit dem Chronometer, der Uhr.

Dann aber arbeiten die Chinesen heute noch mit dem Jahrescyklus der 60. Ebenso taten dies auch früher die Inder und Babylonier, wie auch die Aegypter mit diesem Cyklus.

**Wie aber kamen unsere Vorfahren zu diesem Wissen?...**

Nach den Aufzeichnungen des Berosus, einem Priester des Gottes Bel, so um 280 v. Chr., lebte die Bevölkerung des Landes anfangs in tierischer Rohheit, bis zu dem Zeitpunkt, als aus dem Persischen Golf ein wunderbares Wesen, «Oannes» genannt, herauskam.

Das Wesen hatte einen menschlichen Kopf, eine menschliche Stimme, aber sonst war es körperlich wie ein Fisch gestaltet.

**Dieser Fischmensch «Oannes» habe den Einwohnern :**

Die Baukunst, die Geometrie und die Kunst, den Acker zu bebauen, kurz, alle Bildung beigebracht.

Jeden Abend jedoch sei Oannes ohne jegliche Speisen anzunehmen, in das Meer zurückgekehrt.

Von den, auf diese Art zivilisierten Menschen, habe «Alorus» die Herrschaft erhalten. Nach ihm kamen noch weitere 6 Herrscher, die auch Fischmenschen waren, in der Art des «Oannes», und unterrichteten das Volk.

Wenn also die Babylonier mit Cyklen rechneten von 432.000 Jahren, so haben sie diese von den Fischmenschen übernommen.

### Wer waren diese Fischmenschen ?

Es waren Menschen mit einer sehr hohen Entwicklungsstufe, aus vergangenen Zeiten, die dieses Wissen den Babyloniern beigebracht hatten. Beispielsweise nach der 'Sintflut' oder nach einer Sintflut in vorvergangenen Zeiten.

Wenn sie (die Fischmenschen) aber solches Wissen hatten, so wäre ein allerdings schlechter Vergleich :

Die «Froschmänner» von heute (natürlich nur vom Aussehen, nicht vom Wissen her).

Der Ausdruck «Froschmann» ist entstanden, durch die Bekleidung, die den Menschen einem Frosch ähnlich macht und ihm daher die Möglichkeit gibt, sich im Wasser besser zu bewegen.

### Versuchen wir uns jetzt einmal folgendes vorzustellen :

In, sagen wir 2000 Jahren, ist dieser, bei uns noch allorts bekannte Ausdruck «Froschmann» lange vergessen, da sich wie bekannt, auch die Sprache verändert.

Ein Altertumsforscher findet aber um 4000 n. Chr. eine Chronik, er kann sie übersetzen, und dort ist von einem «Froschmann» die Rede.

Der Forscher wird demnach nach seinem Verständnis (denn Frösche gibt es auch noch zu seiner Zeit), dieses Wort bildhaft übersetzen und versuchen, es bildhaft darzustellen.

Er lässt einen Bildhauer einen Frosch mit Menschenkopf darstellen; und kein Mensch weiss doch was dies bedeuten soll.

Genau so muss es den Menschen gegangen sein, die die Bibel geschrieben oder übersetzt haben.

Zu Zeiten des Perserkönigs «Darius» war das nicht anders um 500 v. Chr. Denn in Persepolis am Persischen Golf, finden wir ein Steinbild. des Fischmenschen, genau so dargestellt, wie Menschen es begreifen konnten zu ihrer Zeit.

Wenn aber diese Fischmenschen solche Anzüge an hatten, um schwimmen zu können, um zu ihrem Unterseeboot zu kommen, das im Persischen Golf ankerte, oder aber auch nur.....um leben zu können, ähnlich den Raumanzügen unserer Astronauten.....

Wenn die Fischmenschen solche Anzüge benutzten um zu ihrem Raumschiff zu kommen, das im Persischen Golf vielleicht unter Wasser lag, dann wäre es doch auch vorstellbar, dass diese Fischmenschen sich in Raumstationen oder auf Planeten im Kosmos aufgehalten hatten,

zunächst in einer Entfernung, dass : 1 Götterjahr = 360 Erdenjahre waren und dann evtl. um dort, auss erhalb unserer Atmosphäre, eine erwartete oder unerwartete Katastrophe zu überleben.

Dann, lieber Leser, besass en sie bereits ein Wissen, um das wir heute immer noch vergeblich ringen.

Jetzt aber stellt sich eine andere Frage :

Warum schreiben die uralten Chronisten :

1 Götterjahr entspräche der Zeit von 360 Erdenjahren?

Die Antwort auf diese Frage liegt im Kenntnisvergleich der Planeten die wir kennen.

### Beispiel :

Betrachten wir die Planeten Saturn und Jupiter.

Saturn = Schwerkraft 1	= Schwerkraft der Erde
die siderische Umlaufzeit	= 29,1672 Jahre
(Sterneumlafzeit)	= rd. 30 Jahre
(29, 1672×12=350,0064)	= rd. 360 Jahre
kleinste Entfernung v.d.Erde	= 1200 Mill. km
(1200×360 = 432.000) Monde	= 10
Jupiter = Schwerkraft	= 2,45 v.d. Erde
kleinste Entfernung v. d. Erde	= 600 Mill. km
siderische Umlaufzeit	= 11,3149 Jahre
	rd. 12 Jahre
Monde	= 12

Nehmen wir obige Zahlen

$$600 \times 360 = 216.000$$

$$1200 \times 360 = 432.000$$

Die Babylonier rechneten ausser dem noch mit :

1 Sosse =	60 Jahre	
1 Nere =	600 Jahre	(10× 60)
1 Sare =	3.600 Jahre	(60× 60)
60 Saren =	216.000 Jahre	(60× 3600)
120 Saren =	432.000 Jahre	(60×3.600x2)

Man erkennt, das sind genau die Cylen, mit denen die Babylonier und Aegypter gearbeitet haben. Es kam also von der Astronomie her, dieses Wissen, das die Fischmenschen den Babyloniern beigebracht hatten.

Man stellt fest, dass die obigen astronomischen Zahlen, mit Abweichungen abgesehen von den Millionen, mit den Cyklen der Alten übereinstimmen.



Doch nun zurück zu den Aussagen der Alten :

Dass 1 GötterJahr = 360 Erdenjahre oder MenschenJahren entspricht

**Untersuchen wir den Ausdruck «Götter» hier unserm Fall.**

**Beispiel :**

Stellen Sie sich vor, ein Mensch aus dem 20. Jahrhundert, ähnlich dem Fischmenschen vor undenklichen Zeiten, findet im Urwald ein sehr weit unterentwickeltes Volk mit seinem Hubschrauber (Flugzeug).

Vor noch nicht allzu langer Zeit war dies tatsächlich der Fall.

Wir würden heute dieses Volk als Steinzeitmenschen betrachten, obwohl dieser Ausdruck nicht zutrifft.

Dieser moderne und auch reiche Mensch, hilft nun diesem Volk, mit seinem Kapital, seinem Wissen und seiner Kultur, damit diese Steinzeitmenschen ihren Lebensstandard erhöhen können.

Aus Prophezeiungen der Priester wissen diese Menschen schon Jahrhunderte, dass irgend wann ein «Gott» aus dem Himmel zu ihnen käme, um ihnen zu helfen.

Wen wundert es da, wenn diese Menschen ihren Helfer, der aus dem Himmel mit dem Flugzeug zu ihnen kam, als Gott verehren?

Und dies nur, weil er ja erwartet wurde und auch in der Lag war, gewissermassen im Handumdrehen den Menschen Erleichterung, Nahrung und Medizin u.a. zu bringen, von dem Volk Jahrhunderte lang erträumt.

**Einstein Lehrt uns :...**

Die Zeit ist relativ, also abhängig von der Geschwindigkeit und somit wird ein Zeitintervall, in einem schnell bewegten Körper (Raumschiff) grösser, je schneller die Bewegung erfolgt.

**Auf das Götterjahr übertragen heisst dies : (Regel)**

Ein Körper (Raumschiff) hat in einer bestimmten Entfernung, bei einer bestimmten Geschwindigkeit, einen «Zeitintervall», der 360 Erdenjahren entspricht.

**Das bedeutet :**

Die Fischmenschen aus dem Persischen Golf müssten mit Flugkörpern aus dem Kosmos gekommen sein, von so weit her :

Dass 1 Jahr ihres Zeitintervalles (Götterjahr), dem Zeitintervall von 360 Erdenjahren entspricht.

Vor noch nicht allzulanger Zeit hätte man über diese Feststellung gelacht, eben aus Unkenntnis.

Heute jedoch, wo man bereits daran denkt, «Raumstationen» in den Kosmos zu bauen, um dort zu wohnen, ist es ratsam, darüber nachzudenken.

Es stellt sich nun die Frage;

Auf welchen Planeten, Saturn - Jupiter oder anderen Planeten, trifft diese Entfernung zu, oder war es eine Raumstation im Kosmos

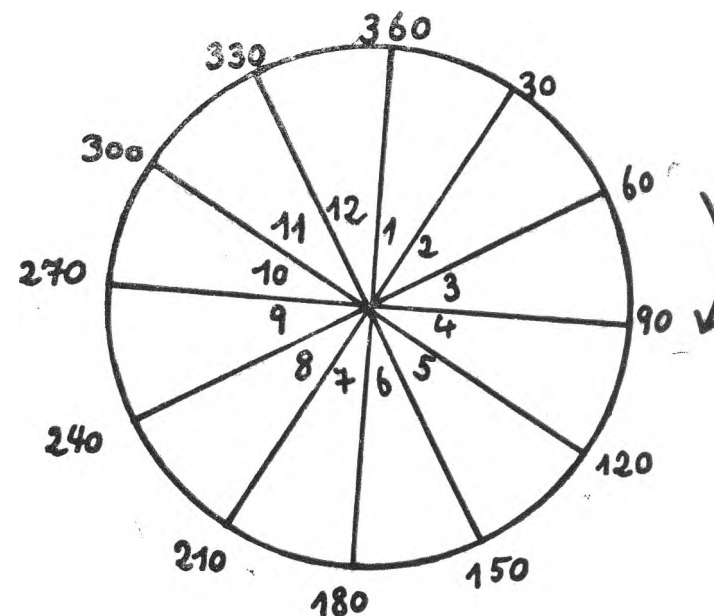
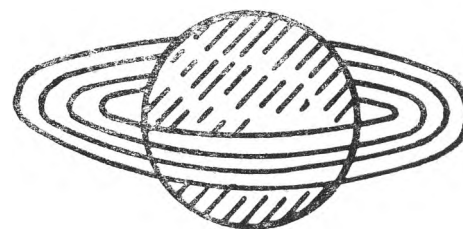
Es wird wohl der Saturn gewesen sein, denn :

Saturn - Umlaufzeit = 29,1672 = (rd. 30 Erdenjahre) um die Sonne  
= 30 Jahre = (Erdenjahre) = 1 siderischer Monat

1 siderischer Monat  $\times$  12 Monate = 360 Jahre

1 Saturnjahr (Götterjahr)

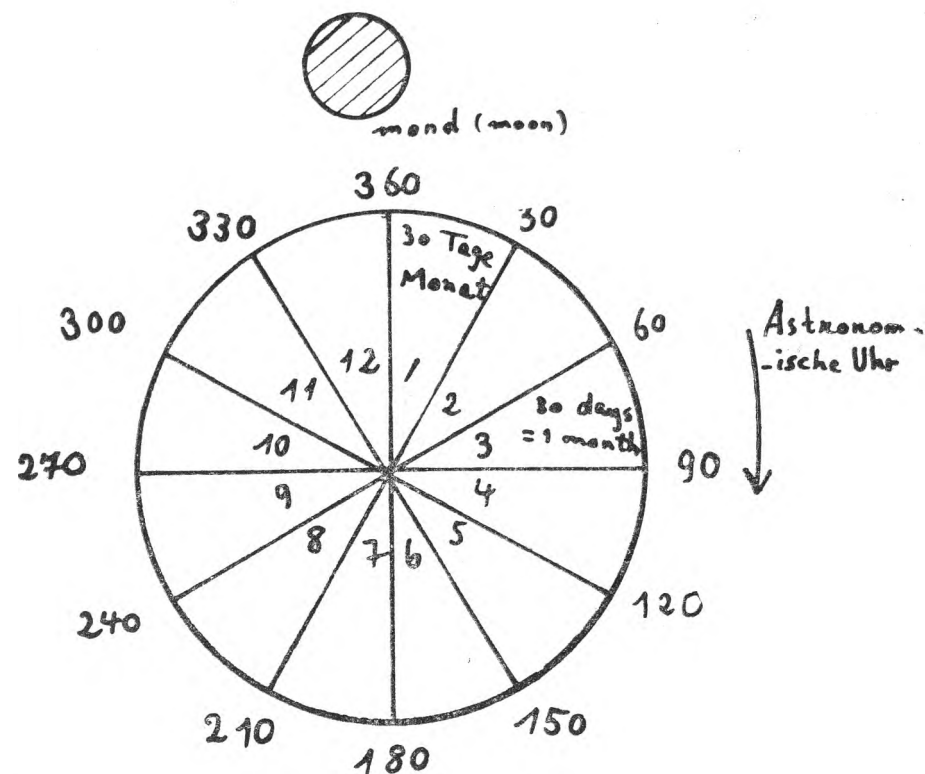
Vergleich zwischen Saturn = 360 Erdenjahre  
Saturnjahr Mondjahr



Astronomische Uhr

Mond umlaufzeit um die  
30 Tage = 1 Monat  
genau  $29,5306 \times 12$

Erde = 29,5306 Tage (rd. 30 Tage)  
mal 12 Monat = 360 a Tage  
= 354,3672 Tage



1 Saturnjahr (Götterjahr) entspricht demnach dem Zeitintervall von 360 Erdenjahren.  
Gesetze des Kosmos

Der Kreis hat einen Radius von 360 Grad, seit undenklichen Zeiten schon. Die Aegypter, die Zweistromländer (Mesopotamien), die Inder und die Chinesen hatten diese Einteilung von ihren Vorgängern übernommen. So wie wir das Wissen von ihnen übernommen haben.

Wie kommt dies ?

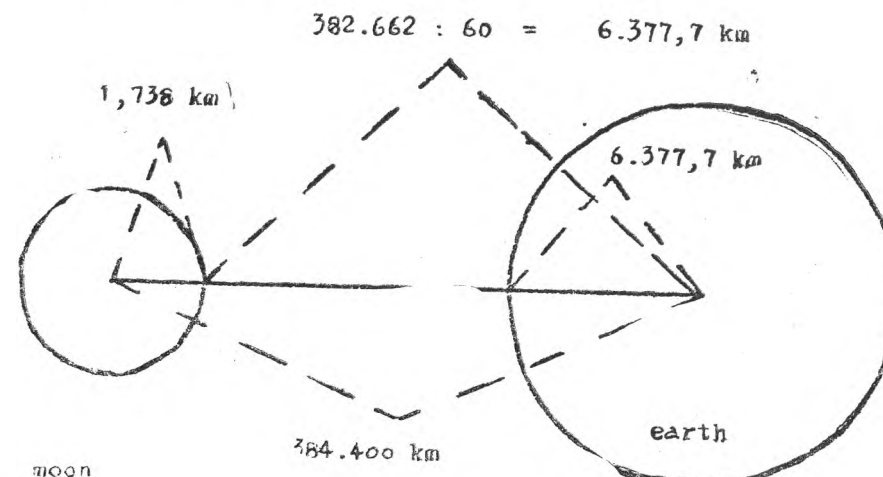
Nun die Zahl 360 lässt sich durch 21 Zahlen, ohne Reste teilen :

360	:	2	=	180	360	:	4	=	90
360	:	5	=	72	360	:	6	=	60
360	:	8	=	45	360	:	3	=	120
360	:	9	=	40	360	:	10	=	36
360	:	12	=	30	360	:	15	=	24
360	:	18	=	20	360	:	20	=	18
360	:	24	=	15	360	:	30	=	12
360	:	36	=	10	360	:	40	=	9
360	:	45	=	8	360	:	60	=	6
360	:	72	=	5	360	:	90	=	4
360	:	120	=	3					

Ein sehr wichtiger Punkt ist :

Der Mond ist 60 x soweit vom Erdmittelpunkt entfernt, wie irgendein Punkt auf der Erdoberfläche.

Daraus folgt, siehe Zeichung :



Wenn man jetzt die Zahl 60 und auch die Zahl 360 mit anderen Zahlen vervielfacht, so kommen wir wieder zu recht interessanten Ergebnissen :

6 × 60	=	360	60 × 60	=	3.600
400 × 60	=	24.000	720 × 60	=	43.200
7200 × 60	=	432.000	3.600 × 60	=	216.000
10 × 60	=	3.600	100 × 360	=	36.000
120 × 360	=	43.200	1.200 × 360	=	432.000

Gesetze des Kosmos

Man sieht, die Zahlenreihen bringen Ergebnisse, die von unseren Vorfahren schon seit undenklichen Zeiten verwendet wurden.

Es sind dies die Zeiten :

360	36.000
3.600	43.200
24.000	432.000
216.000	

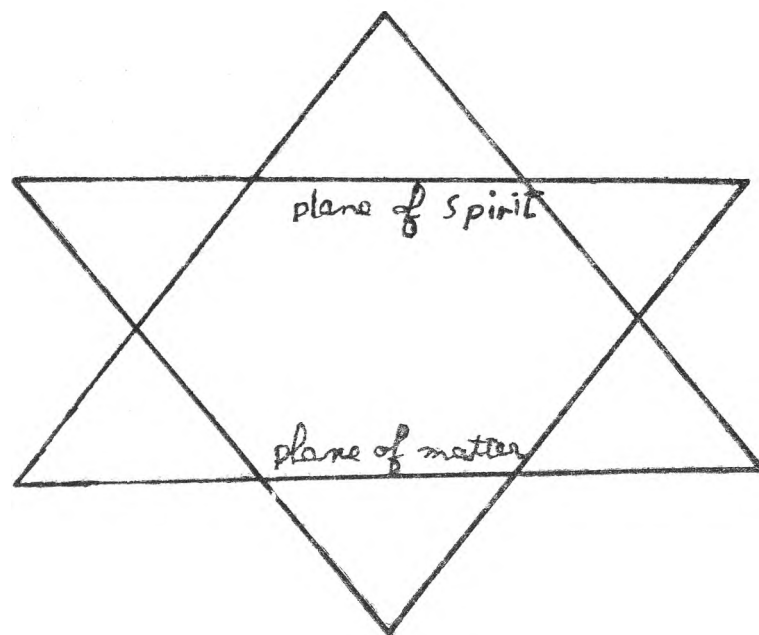
Die Babylonier und Aegypter hatten mit diesen Zahlenreihen gearbeitet. Folglich mussten deren vorfahren Kenntnisse von unerhörter Tragweite gehabt haben, schon vor Jahrtausenden.

Dieses Wissen wurde wieder verloren z.B. durch die Sintflut, durch den Unverstand der Menschen, und auch, dies scheint mir die tatsächliche Erklärung :

Durch eigene menschliche Schuld, denn hätten sie tatsächlich diese **Kenntnisse** gehabt, so waren auch sie an einem Punkt angekommen, auf den unsere heutige Menschheit zielstrebig drauflos geht :

Nämlich die Selbstzerstörung durch modernste Waffen.

Geistenergie



Bewusstsein

Obiges Bild zeigt uns die zwei Dreiecke zusammengesetzt, das geistige Dreieck mit dem materiellen Dreieck kombiniert.

Wenn die Menschheit es fertig bringt, nach diesen kosmischen Gesetzen zu leben und auch danach zu handeln, dann besteht die Aussicht, sich nicht selbst zu zerstören.

#### Die Zeitrechnung der Aegypter nach nach neuesten Erkenntnissen :

In vorchristlichen Zeiten suchten die Europäer, durch die Griechen hauptsächlich vertreten, bei den Priestern in Aegypten, auch «Magier» genannt, zu studieren.

Dort versuchten sie, das Wissen zu holen, es nach Europa zu bringen und dort zu verbreiten.

So war denn auch Herodot um 500 v. Chr. bei den Magiern in Aegypten ten und diese berichteten ihm folgendes, das er wörtlich für uns aufnotierte :

.....dass die Jahre immer gezählt und aufgezeichnet worden seien.

Die Priester zeigten ihm im Tempel zu Theben 345 hölzerne Kolossalbilder der Oberpriester, die ebenso viele Generationen hindurch, der Sohn nach dem Vater, dem Tempel vorstanden.

Könige aber, seien es von Menes, dem ersten König der Aegypter, bis Sethos, 341 gewesen, - Der Zeitraum aber sei 11 340 Jahre gewesen.

In dieser Zeit, so sagten die Priester :

Habe die Sonne 4 × ihren Sitz verlassen, wo sie jetzt (500 v. Chr.) untergeht, sei die Sonne zweimal aufgegangen und wo sie jetzt aufgeht, sei sie 2x untergegangen...und nichts in Aegypten habe sich verändert weder was die Erde, noch was den Fluss betrifft.

Warum konnte Herodot diese Aussagen der Priester nicht verstehen?

Ganz einfach deshalb, weilman zu seiner Zeit, übrigens bis ins 19.) Jahrhundert noch, der Meinung war, dass die Erde erst ca. 600 Jahre alt sei.

Dann natürlich auch deshalb noch, weil die Priester ihren Schülern nicht alles vermittelten.

Ein Priester «Berosos» (um 300 v. Chr.) aus dem Zweistromland und auch der Aegptische Priester Manethos (um 280 v. Chr.) berichteten unabhängig voneinander, von Zeiträumen um 432.000 Jahren vor der Sintflut z.B.

Die Griechen und auch die Römer versuchten nun, entsprechend ihrem Weltbild und Wissen, diese Zeiträume zu reduzieren um sie einpassen zu können.

Wenn wir davon ausgehen, dass immer schon das die Wahrheit war was die jeweilige Gesellschaft als richtig erkannt hat oder anerkannte, so kann man verstehen, dass diese gross en Zeiträume mittels des Cyklus der '60' klein gemacht wurden, damit das eigene Weltbild wieder richtig war.

Hier aber wird von mir nachgewiesen, was die Priester dem Herodot berichteten, und ungelöste Fragen beantwortet.

Durch die Anziehungskraft der Sonne, des Mondes und einiger Fixsterne auf den Aequator unserer Erde, beschreibt unsere gedachte Erdachse eine sehr langsame Kreisbewegung in diesem Zentrum.

#### Zeitrechnung der Aegypter

Dadurch findet, von der Erde aus gesehen, eine Ortsveränderung der Fixsterne, durch Verchiebung des Aequators auf dem Tierkreis (Ekliptik) statt, und damit eine Vorrückung der Tag-und Nachtgleiche am 21. März, nach jeweils einem Aeon (Zeitalter). Solche Zeitalter sind u. a. 24.000, 43.200 Jahre

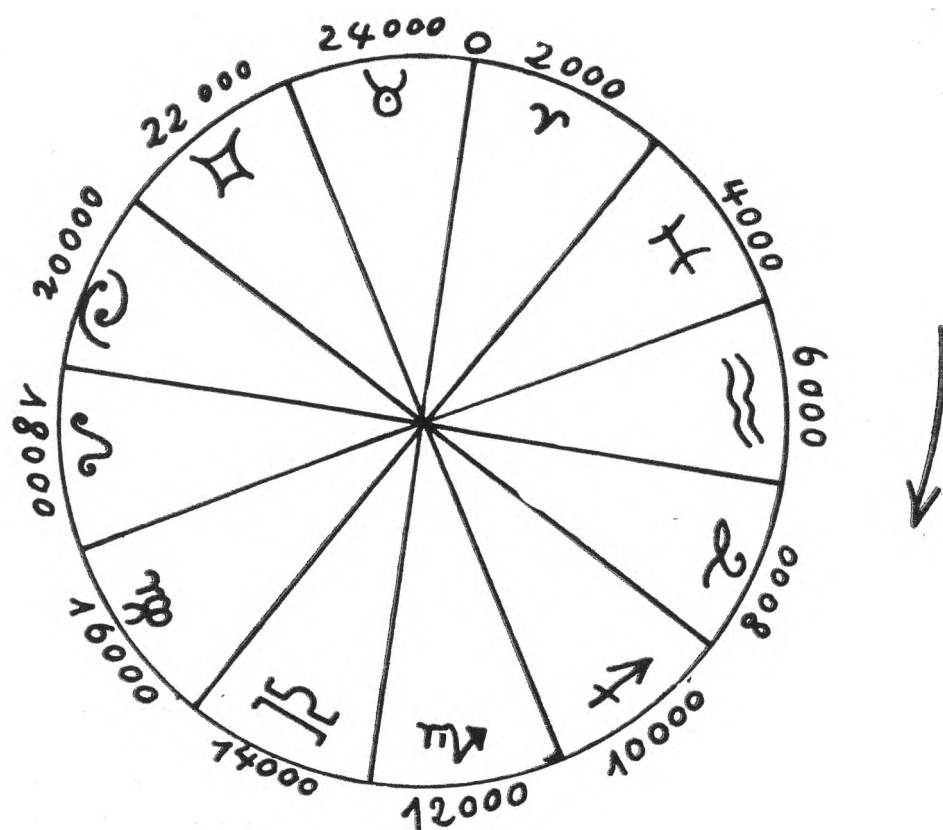
Diese Verlängerung des Frühlingspunktes wird «Präzession» genannt und die Wanderung durch den Tierkreis (Ekliptik), erfolgt gegen den



Uhrzeigersinn, also rückläufig, von West nach Ost mit einer Geschwindigkeit von ca. 40 Bogensekunden in einem Jahrhundert für das Zeitalter von 3.000.000 Jahren. ...

- Das entspricht etwa 66.6666 Jahren pro Grad ( $66,6666 \times 30 \text{ Grad} = 1999,999 \text{ Jahre}$ ), das sind ca. 2000 Jahre pro Tierkreiszeichen mal 12 = 24.000 Jahre = 1 Zeitalter.
- Nehmen wir 100 Jahre je Grad mal 30 Grad = 3000 Jahre mal 12 Tierkreiszeichen = 36.000 Jahre = 1 Aon.
- Nehmen wir 120 Jahre mal 30 Grad = 3.600 Jahre mal 12 Tierkreiszeichen = 43.200 Jahre = 1 Aon u. s. w.

Um das Vorhergesagte zu verstehen, nehmen wir Beispiel a)



### Aegyptische Zeitrechnung

Betrachten wir die astronomische Uhr mit den Tierkreiszeichen.

Entgegen der normalen Uhr, auf der die Sternkreiszeichen im Uhrzeiger sinn stehen, also z.B. Steinbock - Wassermann - Fische - Widder, verlagert sich bei uns hier die Präzession oder Frühlingspunkt rückläufig durch die Ekliptik oder das Tierkreiszeichen, also Widder - Fische - Wassermann - Steinbock u.s.w.

Wenn also der 21. März, der Frühlingspunkt, wieder an seinem ursprünglichen Platz angekommen ist, nach einem ganzen Aeon, dann sind in diesem Falle 24.000 Jahre vergangen.

Der Zeitraum eines Sternkreiszeichens ist 2.000 Jahre nach a), davon wollen wir ausgehen.

Es ist bekannt, dass die Aegypter auch mit der Phönixperiode gerechnet haben.

### Was ist die Phönixperiode?

Nach Demokrit von Abdera, einem griechischen Philosoph (um 460-370 v.c) einem Vorläufer der modernen Wissenschaft,

kannten die Aegypter seit Alters her neben dem Wandeljahr, ein festes Jahr mit 12 Monaten, mit vierjähriger Einschaltung.

D.h. : Das Sonnenjahr hat 365 Tage plus alle 4 Jahre ( $1/4 \text{ Tag pro J.} \times 4 = 1 \text{ Tag} = 366 \text{ Tage}$ , also ein Schaltjahr.

Nach Plutarch (46—120 n.chr.) arbeiteten auch die Aegypter mit der Apisperiode von 25 Jahren.

Der Apis war der heilige Stier der Aegypter und über diese Apisperiode kommen wir zur kleinen Phönixperiode von 500 Jahren zur grossen Phönixperiode von 1500 Jahren. usw.

Mit der kleinen Phönixperiode wollen wir uns näher befassen, denn mit ihr müssen wir arbeiten.

Der Unterschied zwischen dem Aegyptischen Kalender und dem heliakischen (Sonnen) Aufgang des Sirius, dem hellsten Fixstern im Sternbild des Grossen Hundes, wuchs im Laufe einer Siriusperiode von 1460 julianischen Jahren, auf 11 Tage an.

Während dieses Siriusjahres von einem heliakischen Thoth (Mond?) zum andern, glich sich das bürgerliche Jahr in 1460 Sonnenjahren wieder aus.

Das tropische, oder Phönixjahr, glich sich von einem solstitialen (Sonnenwende) Thoth zum anderen im 1505 Jahren aus, oder mit einer sehr kleinen Abweichung von unserer heutigen Zeitrechnung gerade 1500 Jahre.

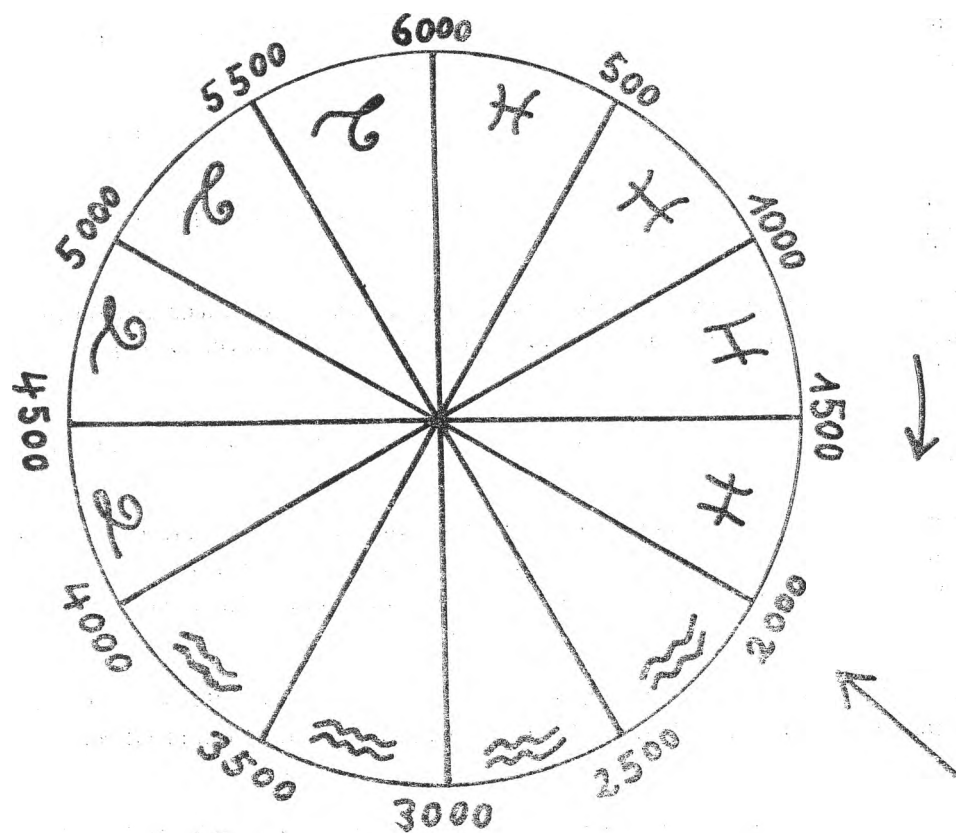
Die grosse Phönixperiode beträgt 1500 Jahre, der Phönix selbst, stellt bei den Aegyptern ein Bild, der durch «Seelenwanderung» gereinigten Seele dar, die auch jederzeit als Vogel mit Menschenkopf gedacht wurde und auch so abgebildet worden ist.

Diese Vorstellung wurde denn auch von den Griechen mit übernommen, denn die von Pluto dargestellte Seele erscheint geflügelt, die in einem : zyklische Lebenszeiten gebundenes Aufstreben der Seele zu ewigem Licht der Sonne, dem Grundprinzip der ägyptischen Religion, bestand.

#### Ägyptische Zeitrechnung

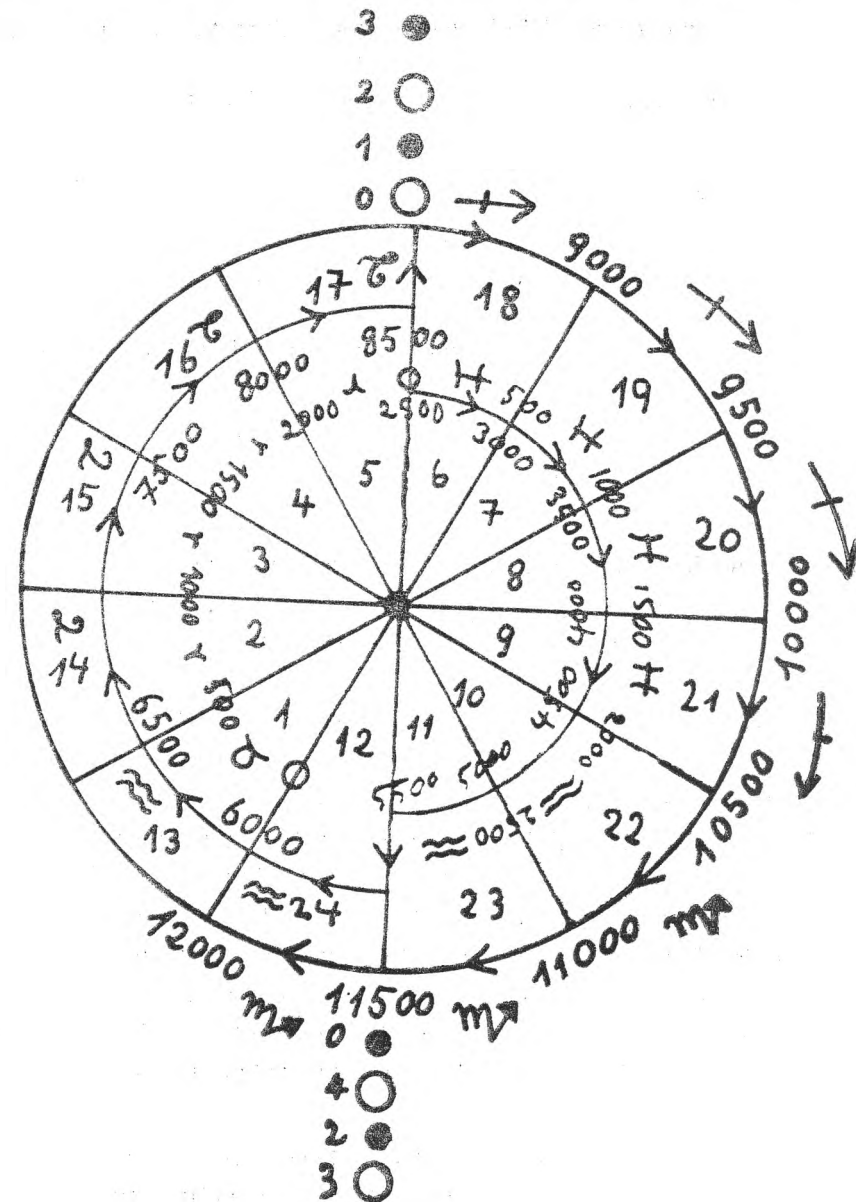
Die kleine Phönixperiode ist in einem Tierkreiszechen von 2000 Jahren 4 mal enthalten.

Betrachten wir das vorliegende Bild, so erkennen wir 4 Fischeperioden mit jeweils 500 Jahren, die sich in einem Tierkreiszeichen befinden.



Wir zählen von oben im Uhrzeigersinn und kommen zum Ende mit 6000 Jahren. Beachten Sie bitte, dass wir zur Zeit den Uebergang haben vom Fische — zum Wassermannzeitalter, ein weiterer Beweis dafür, dass das, was hier gesagt wird, auch den Tatsachen entspricht. Die Priester berichteten Herodot, dass in einem Zeitraum von 11.340 Jahren Menschen gelebt hätten und keine Götter.

Auch, dass die Sonne 4 mal ihren Sitz verlassen habe.



Hier auf dem vorliegenden Bild wird dies nachgewiesen.

Im Innern des Kreises beginnen wir beim 2. Haus unten. Ausserhalb des Kreises steht unten zum Zeitpunkt des Gespräches von Herodot mit den Priestern, die untergehende Sonne und oben nbei 2.500 Jahren, die aufgehende Sonne.

Wir folgen jetzt dem Kreispfeil im Uhrzeigersinn, nach rechts unten, dort steht jetzt bei den Jahren 5.500 die aufgehende Sonne (1) und oben die untergehende Sonne (1).

Wir folgen dem Kreispfeil weiter nach oben, bei 8.500 Jahren steht jetzt die aufgehende Sonne (2) und unten die untergehende Sonne (2). **jetzt folgen wir wieder dem Pfeil nach unten, dort steht bei 11.500 Jahren die aufgehende Sonne (3) und oben die untergehende Sonne (3)** Um zu 12.000 Jahren zu kommen, wären demnach, wie nachprüfbar, 24 Häuser des Tierkreises notwendig.

Das ist der Beweis :

Die Sonne hat tatsächlich 4 mal ihren Sitz verlassen, dort wo sie zum Zeitpunkt des Gespräches aufging, war sie zweimal untergegangen, und dort wo sie unterging, war die Sonne 2 mal aufgegangen... und nichts in Ägypten hatte sich verändert, weder was die Erde, noch was die Sonne betrifft.

Damit ist das Rätsel gelöst, das Menschheit seit ca. 2500 Jahren beschäftigt hatte.

Die Folgen dieser Erkenntnis sind nicht vorherzusehen, in jedem Falle muss unser geschichtliches Zeitdenken geändert werden.

Nophretete z.B. hatte nach der jetzigen Zeitrechnung um 1360 v.Chr. nach dem Hethiterkönig gesandt, ihm einen Sohn für ihre Tochter zu senden.

Nach den neuen Erkenntnissen wäre dies dann um 1770 v.Chr. gewesen.

Die Zeitrechnung des Deutschen Lepsis, der um 1845 n. Chr. den Ägyptern Kultur von ca. 4.000 Jahren gegeben hatte, ist somit von mir auf ca. 12.000 Jahre erweitert worden und auch nachgewiesen.

Die Art der Berechnung was es, die Herodot unbekannt war und auch die Grösse der Periode, mit der gerechnet werden musste.

So ist es auch verständlich, warum auch wir nicht verstehen konnten, dass die Sonne 4 mal ihren Sitz verlassen hatte, ohne dass sich irgendetwas in der Natur, oder für den Menschen erkenntlich, geändert hätte.

Wenn Sie aber die astronomische Uhr betrachten, und 1.5 mal im Uhrzeigersinn dem Pfeil folgen, dann stellen Sie sofort fest : Tatsächlich, die Sonne hat ihren Sitz 4 mal verlassen.

Lieber Leser !

Die vorliegende Schrift habe ich angefertigt, um die Öffentlichkeit für meine Arbeiten zu interessieren.

Es liegen zwei Manuskripte vor in Form einer Weltchronik.

1. Die Völker der 5. Wurzelrasse  
(2000 v. Chr. — ca. 100 v.Chr.)  
der : Götter, Priesterkönige und Religionen

2. Die Völker der 5. Wurzelrasse 2. Band  
(100 v. Chr. — ca. 1300 n. Chr.)

oder : Die Historien vom 4. bis zum 7. Reich des Altertums in Europa 3. Atlantis

Die Chroniken berichten über Völker Europas, Asiens, Afrikas und Amerikas u.a.

Die Aussagen sind nachprüfbar, wie das vorliegende Material und genau so interessant, denn sie betreffen die Zeit vor den Römern in Europa, in der Hauptsache.

Es sind genaue Angaben über die Völker mit ihren Königen zu jener Zeit wo sie wohnten und wo sie herkamen, ihre Religionen.

Ich habe die Zeitrechnung : Nach Erschaffung der Welt wieder entdeckt, in ihren Aufbau und der Handhabung, es ist also alles nachprüfbar.

Die vorliegende Schrift soll eine Kostprobe sein, von dem, was Sie erwartet.

Bitte helfen Sie mir, meine Werke zu drucken, demonstrieren Sie für meine Arbeiten, denn dieses Wissen sollte nicht verloren gehen.

Bruchsal, den 21. März 1976

K. Zittel

## FRUHLINGSANFANG

### LAWS OF THE UNIVERSE CHRONOLOGY OF EGYPT

#### SUMMARY OF SCIENTIFIC WORK

- 1.) a) the knowledge of humanity about the laws of universe, or kosmos in the last 12.000 years.
- b) from Thales of Milet (624 before chr.) to Nicolaus Copernicus (1473 — 1543 after chr.).
- c) Johannes Kepler (1572 — 1630 a.chr.) and his laws about universe.
- d) Isaac Newton (1643 — 1727 a.chr.) and his laws of gravity.
- e) Einstein and his laws.
- f) the rotation of the mercur.
- g) energy of spirit, the main energy of universe.
- h) conception of : time — room — quickness — distance and acceleratic.
- f) the extention of time — induction — induction — the two consciousness of man.



- k) the circle of the number «60» and his history.
- 1) who was the fishmen?
- m) 1 year of gods, that is the same as 360 years of earth.
- 2 a) the chronology of Egyptai, after new knowledges.
- b) the Egyptian know the same chronology by thousands of years, as ourselves, also we can see that with the zodiac of Palmira.
- c) what is the period of Phoenix ?
- d) the riddle, what Herodot placed 2,500 years before humanity is solbed : the sun has changed her residence for 4 times and nothing has changed in Egypt, so far as the river is concerned and so far as concerned the earth.  
(Herodot II 142/Palto, pag.22./ Diodorus 1. 29).
- e) the Egyptian human chronology, not the chronology of gods is not only 4,000 years old, as the German «Lepsius» 1845 A.D. had told us, but nearly 12,000 years.
- 3 ) the publisher myself, who published the chronicle of the world the nations of the 5<sup>th</sup> race of the root of main , also published the greatest sensation of history in the 20<sup>th</sup> century.



ram (Widder)



bull (Stier)



twin (Zwillinge)



cancer (Krebs)



virgin (Junfrau)



lion (Löwe)



ballance (Woage)



scorpion (Scorpion)



marksman (Schütze)



ibex (Steinbock)



water carrier  
(Wassermann)



fishes (Fische)

## SEQUENCE OF EVENTS WHICH LED UP TO THE DISCOVERY OF TUTANKHAMON'S TOMB (1).

BY  
IBRAHIM KAMEL  
ex-Director of Local Museums

### PREFACE

It was in 1942, when I had the opportunity to be at LUXOR, and when I had been informed that a certain GABALLA had bought the contents of the library which was in the Metropolitan House at GURNA. I met the man, and I purchased some few books from him.

Through the pages of one of those books (the guide to the Cairo Museum, by Quibell), dropped a small paper written by HOWARD CARTER himself in pencil, mentioning some Arabic words in English letters and their translations into English. Beside these, were inscribed the following words :

1. HUY
2. LUXOR TEMPLE
3. MORTUARY TEMPLE

I did not care, at that time, to ponder the meanings of those words until the year 1951, when I was appointed Curator of the Theban Necropolis at GURNA. MY attention was drawn to the tomb of TUTANKHAMON, and to CARTER'S notewords mentioned above. These words were the suppositions of CARTER in 1915 about what was known of that royal personality.

All my inquiries were concentrated, after that, on the persons who were working with CARTER when he started the clearance in the Valley of Kings looking for the royal tomb of TUTANKHAMON, in order that I might know something about the details of the discovery. Abdel Maaboud Abdalla, the ex-chief guardian of the Theban Necropolis, and who worked with CARTER as a sub-photographer, began to inform me few details concerning the excavations undertaken by CARTER and the moments which preceded the great worldly discovery.

The story was then completed when I went to QIFT (Province of OUENA), and met Mohammed Qurquar who was the formeman of CARTER'S excavations when he began the work in the valley, until all the monuments of TU-

(1) The essay was ready to be published on August 1972 at the anniversary of TUTANKHAMON'S tomb discovery.

TUTANKHAMON were sent to the Egyptian Museum at CAIRO. The aged man Qurquar, who lost his sight in 1940, was quite anxious to relate the details of events of the discovery day by day, and to give a truthful record of what had happened thirty years ago. I felt, as an Egyptologist, that I was living through the course of events which led up to the discovery of TUTANKHAMON'S tomb.

Years passed, and all those who is too small to include a royal burial, died. I thought it would be useful to put on record a few facts that might help facts otherwise would be difficult to find, or that even might be lost. Such facts, came to me by those mentioned above, who participated in the discovery. Meanwhile, I had not to miss the remarks of Dr. LUCAS who examined and treated the contents of the tomb from winter 1923 to 1930.

Thus, through these pages, I had to fill the gaps of the whole story, and to arrange the details of thoughts and informations according to the sequence of events.

## INTRODUCTION

The descending steps leading to the tomb of TUTANKHAMON were discovered on Saturday, the fourth of November 1922, and the objects extracted from the tomb are on display in the Egyptian Museum at CAIRO, where they occupy two long galleries, together with a large room where the jewellery and more precious objects are kept.

HOWARD CARTER AND A. C. MACE published a popular book on the tomb in three volumes in 1933, while PENELOPE FOX, the assistant secretary of the Griffith Institute, has published also, another book about TUTANKHAMON'S TREASURE in 1951. Although these books are now out of print, yet there are hundreds of printed illustrations about the monuments of the royal tomb in the market.

The Valley of Kings lies behind the western cliffs of THEBES in Upper Egypt, some 650 kilometers south of CAIRO, desolate and cut off from the fertile fields on either side of the Nile. The site was originally chosen earlier in the Eighteenth Dynasty by King THOTMOSIS I of the New Kingdom to dig his burial place, when he found that the burials in pyramids did not preserve the royal mummies of his ancestors, and that all the pyramids were broken into, their treasures seized, and their mummies searched.

Indeed, at the beginning of the Eighteenth Dynasty, there was not a single royal tomb left undisturbed in the whole of Egypt. The only solution for such a problem was settled by hewing the royal tomb out of the rock in in secrecy, and by concealing the entrance of the tomb under piles of rubble.

At the same time, the mortuary temple, adjoint to the royal burial, was built upon the plain on the edge of the cultivation, east of the valley and far from it. And, although both the sepulchral chambers and the mortuary temple were situated in one place, yet the two were separated by the intervening cliffs.

This example of THOTMOSIS I was followed for several hundred years, and the valley continued to be the royal cemetery of the Eighteenth, Nineteenth and Twentieth Dynasties, and its romantic history began.

As it was the custom to bury jewellery and other precious articles with the King's body, there were always great robberies. During the Eighteenth Dynasty, the royal tomb was constructed but with a small and rough entrance hidden by mounds of debris thrown over the mouth of the tomb. Beside, the deep wells and the misleading corridors inside the hewed tomb, there were large numbers of police-men and watchmen stationed in and around the Valley of Kings, and there were also numerous officials and priests connected with the Theban Necropolis. But inspite of all those precautions, a series of robberies was detected. In time of HOREMHEB, the tomb of THOTMOSIS 4 th., was penetrated, and King HOREMHEB had to renew the robbed tomb, and to issue instructions for the preservation of the royal burials. (1) Anyhow, the strong rule of HOREMHEB kept the valley and its treasures fairly safe for a while.

Robberies continued again, and the pharaohs of the Nineteenth and Twentieth Dynasties seemed no longer to take much trouble to hide their tombs and the entrances were only closed with a wall of stones and debris. The concealment of the royal burials did not give the security that they had hoped for, and all the tombs were plundered at the end of the Twentieth Dynasty when the tomb-robbing became a laudable occupation in Thebes, and the conditions became rapidly worse. The helpless priests of the next dynasty made an attempt to safeguard the bodies of the Kings and to hide them. They re-embalmed the mummies and transported some of them to an unfinished tomb at Deir el Bahari, found in 1881, and the others in the tomb of King AMENHOTEP II discovered in 1898.

The royal burials in the valley stood open or half choked with rubbish and contained no antiquities. Greek and Roman travellers left their names upon the walls of tombs, meanwhile, some Coptic hermits used them as dwelling places. The historians STRABO, DIODORUS, POCOCKE, BRUCE and Napoleons' archeologists visited the site, counted the royal tombs, and gave a record of them.

## PREVIOUS WORK

Since 1819 to 1900, the active role of the Egyptologists took place in a series of clearances, excavations and studies which proved highly successful. BELZONI, SALT, DROVETTI, LEPSIUS, PASSALACQUA, CHAMPOLION, MACE, ROSELLINI, WILKINSON and RHIND uncovered many royal burials in the Valley of Kings. In 1902 to 1915, DAVIS with the collaboration of the skilled Egyptologists of the Antiquities Department like QUIBELL.

(1) From a graffiti on a wall of the lower chambers in the tomb of THOTMOSIS IV, See : Tomb of THOTMOSIS IV, by CARTER and NEWBERRY, LONDON 1904, pp. XXXIII-IV figs 7 and 8.



CARTER, WEIGALL and AYRTON conducted a good work in or near the valley. The tombs of THOTMOSIS IV, YUYA and his wife THUYA, SIPTAH, Queen TA-USERT, HOREMHEB, and that of SEMENKHKARE, probably, were all discovered.

Thus, in 1915, all the royal burials of the Eighteenth, Nineteenth and Twentieth Dynasties were unearthed, from THOTMOSIS I to RAMSES XII with rare exceptions. The tombs were numbered together with the uninscribed burials or pits, from No. I to No. 60, and the important ones were lit by electricity.

DAVIS was quite sure that there were no more tombs than those known in consequence of his discoveries, and remarked (I fear that the Valley of the Kings is now exhausted).

Comparing the list of Kings with, both the tombs discovered in the valley, and the royal mummies found either in the Deir el-Bahari cashet or in the tomb of AMENHOTEP II, it was found that the two missing royal personalities were : TUTANKHAMIN and RAMSES VIII. Regarding TUTANKHAMON, it was thought that the burial pit No. 58, which was discovered by AYRTON and DAVIS in 1908, was the real tomb of that pharaoh. While the Egyptologists assured, concerning RAMSES VIII, that his tomb is not situated in the valley at all, and that RAMSES VIII had reigned in the north for but a year.

#### SUPPOSITIONS OF CARTER

HOWARD CARTER, as an Egyptologist, got his practical experience through the excavations undertaken by the Antiquities' Department in the Valley of Kings since 1902. In 1915, CARTER found the earlier tomb which queen HATCHEPSUT had constructed for herself before she made the large burial in the Valley, in the face of a cliff on a site called TAQUET ZAYED.

He left his work in the Department to return back in 1917 to dig in the Valley of Kings, financed by Lord CARNARVON, under the supervision of the Griffith Institute.

His aim was to look for the real tomb of king TUTANKHAMON, and he was quite sure that his own suppositions were correct and that there remained the possibility of finding the burial place of that pharaoh in the valley. His suppositions were based on :

1 — TUTANKHAMON'S name was evidence that he added to the temple, and of LUXOR temple, giving the found on the walls of the first courtyard that the decorations and the scenes showing the yearly festival of the Theban Triad, were his own work. This fact proved that he ruled already from Thebes, and that his burial place should exist in the western part of the Capital.

2 — East of the Valley of Kings, were unearthed some blocks bearing the names of TUTANKHAMON. Those blocks should have formed once a part of his mortuary temple, and that the royal tomb must have been hewed in the Theban Necropolis.

3 — Another fact assured the first supposition. That was the scene representing TUTANKHAMON on the walls of an official's tomb at GURNA (Tomb of HUY). The scene shows the king receiving tributes from tribes of Assyria, Retenu and Sudan.

4 — The burial pit No. 58 discovered in 1908, (1) and which they took wrongly to be the tomb TUTANKHAMON, is too small to include a royal burial, and it could never had been informed to be a king's tomb. And, although DAVIS and AYRTON assured that the pit was the real tomb of the King, yet CARTER did not accept their suppositions. He considered that the pit was an unfinished burial, and it should had been used simply as a hiding place for some of the loot taken from the real tomb of the King when it was rifled.

5 — The ancient theory of the Egyptologists before 1880, stated that the pharaoh was a god and that he was not in need of possessions for his tomb. This theory was out of date since the discovery of the cachet at Deir el-Bahari in 1881. The royal mummies had been found with hundreds of pieces of equipment and objects of different sorts. The fact, that every royal burial included funerary furniture, belongings and jewellery, was assured also by the excavations executed in the valley after 1902. So, the discovery of TUTANKHAMON'S tomb might reward the excavator.

All these factors above, gave hope to CARTER to dig in the valley searching for the King's tomb. To lose hope did not ever occur to CARTER, even when he met MASPERO (the Director of the Antiquities' Department) to sign the concession. MASPERO advised CARTER not to dig in the valley, as he did not believe that the area rewarded further investigation. But, who could stand against the insistence of CARTER who was satisfied thoroughly that his own suppositions were correct.

#### THE EXCAVATIONS

The excavations started actually in 1917/1918, and went on for four seasons more, but yielded poor result. The sixth season 1922/1923 was the final season of the mission. Lord CARNARVON declared that he was not ready to allot any more money for the excavations which seemed disappointing from his point of view. As soon as the last season started, disputation between CARTER and CARNARVON, and severe argument, arose when the Peer insisted on diminishing the sum allotted for the excavations. The situation became worse after some couple of weeks.

Qurquar, the overseer of workmen, informed me that at the end of 31 October, and after the workmen had got their wages, the work was stopped al-

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(1) Pit tomb No. 58 lies between the tomb of RAMSES VI and that of HOREMHEB. In this pit, a number of objects including a fine alabaster statuette and several pieces of gold leaf, bearing the name of TUTANKHAMON, were found.



ready. The well-experienced overseer was quite sure that they were going to be rewarded, and that they were on the point of an imminent discovery. So, he crossed the Nile on that day, met CARTER at Winter Palace Hotel, and convinced him to continue the digging the second day. How and why was it, that CARTER agreed to assume the excavations? This was a subject of a discussion between me and Qurquar when I saw him in 1951.

The aged man stated that he observed an ancient chiselling in situ, noticed the untouched chips which began to appear in the course of work at the end of October, and at last, it was the Egyptological sense which he gained through his hard work tens of years. All these factors led the man to swear to CARTER that he was ready to take on his behalf all the wages of workmen if the excavations yielded nothing within two days.

At that time, the clearance reached the low hill through which RAMSES VI had hewed his tomb. In front of the entrance of that burial, there were few ancient workmen's huts dating to the Twentieth Dynasty, and in order to clear the whole bottom of the hill, they had to remove those huts. CARTER did not hesitate, especially when his attention was drawn, by Qurquar, to the traces of an ancient chiselling in the living rock, few yards to the south of RAMSES VI tomb's entrance. Taking off the debris afar, and on the second day of November, a step hewn in the rock was discovered underneath. There were sixteen steps descending to a rectangular undecorated doorway of a tomb, heavily plastered.

Lord CARNARVON, living in the hotel at LUXOR, was soon informed about the encouraging news, and on the fourth day of November (Saturday) 1922, the wall which once blocked the doorway, was removed. That wall led to a descending passage ending with a similar blocked and plastered doorway (See plan I).

### FIRST REMARKS OF CARTER

After examining the walls which blocked the doorways, and the descending passage, the observations of CARTER were concentrated upon the following points :

1. The doorway of the tomb was blocked by a wall built from floor to lintel, while the outer surface of the wall was heavily coated with plaster. It was well noticed that there were two successive openings and reclosing of the tomb. The disturbed plaster, on one side, bore the seals of the royal Theban Necropolis, while the undisturbed surface, on the other side, bore the seals of king TUTANKHAMON.
2. The descending passage filled with rubble, gave proof that the royal burial was penetrated. There were clear signs that an opening had been made since the original closing of the tomb. A part of the passage was full of white clean untouched chips, while the other part of the passage, which faced the disturbed plaster of the wall, was filled with dark chips which continued down the passage as far as the second doorway.

3. An ancient water-skin with traces of good smell was found in the debris, and in the disturbed part of the passage. This fact gave evidence that the disturbed part of the passage was used more than once by robbers after closing the tomb.

4. The second doorway was plastered and sealed in the same way of the first one. That is to say, the disturbed plaster bore the seals of the Theban Necropolis, and the undisturbed part bore only the seals of TUTANKHAMON.

The above mentioned remarks gave enough disappointment to the discoverer for some time. It is understood that the resealing of the outer doorway, the tunnel cut through the passage with the water-skin in debris, and the corresponding resealing of the second doorway, all implied that the royal burial had been robbed.

At the same time, the facts mentioned above, gave the answer to the question as to the delay of the clearance from the fourth of November to the twenty-sixth.

Caring not to remove the wall which blocked the second doorway, CARTER, on the 26 th. of November, made a small opening in that wall through which he pushed an electric lamp in order that he might state whether the tomb could be cleared or not. It was the suprising moment that CARTER was waiting for so long. For seconds, the electric light reflected on the golden couches and chariots, and strongly glittered. The excavator thought that he was living in a happy dream, so, he shut his eyes for some instances, and when he opened them again consciously, he saw an antechamber filled to overflowing with furniture and equipment of every kind.

### PRESERVATION AND REGISTRATION

Regarding the royal antiquities which are now exhibited in the CAIRO Museum in a very good way of preservation, I have to record that the work done by CARTER and his assistants, through nine years, was properly executed. Before touching any monument, the chamber with its contents was pictured. Every object was transported carefully to a big, lightened, well-equipped and guarded tomb in the valley. The object was then studied, restored, photographed, registered, and packed to be sent in safety to the Museum. Nothing was left in the burial except the sandstone sarcophagus with the outer of the two wooden gilded coffins including the mummy of the King. While the red granite lid, broken and repaired, was deposited beside the sarcophagus on the floor of the burial chamber.

The other less important antiquities and the much decayed objects of the royal find, were all collected and stored in the two small chambers : the Annexe and the Treasury, so that the tomb could be prepared for the visitors. Those objects were kept safe until 1954 when the writer of this essay made an inventory of them.

Thanks to Mr. ALY BAHGAT, the first restorer of the Antiquities, who fairly restored a big quantity of the monuments which are exhibited in the LUXOR Local Museum.

### THE ANTECHAMBER

On entering the antechamber and emptying its contents more facts came into existence :

A — Although the room was small, yet it was filled with furniture and objects of every kind, piled high upon one another without any order. (1) The chariots of the King, lying to the left of the doorway, had been turned over and were mingled with alabaster jars, dismounted wheels, and other objects. Even, the ornamentation of the chariots had been wrenched away, and small parts were scattered.

B — When examining the boxes which contained the garments and the under-linen clothes, it was found that the contents had been switched about, and that objects unconnected to one another were put together.

C — In spite of enough proof to demonstrate the robbery of the chamber, yet there had been an attempt, made in ancient times, to tidy up the contents after the robbers' visit.

D — On a lid of one of the wooden boxes, there was a docket written in hieratic, giving a list of the contents of the box. The docket quoted 17 objects of blue lapislazuli, but when opening the box, there were 16 libation vases of blue faience, while the seventeenth being found subsequently in another part of the antechamber.

Why was this docket fixed to the box? and Who inscribed it? These were the first two questions which jumped to the head of the excavator. The third question came after that. Who began to arrange and organise the contents of the antechamber? and Why did he stop?

### THE ANNEXE

A third doorway leading to another small chamber (the annexe) was seen. There was a big hole in the wall which once blocked the doorway, a hole wide enough to admit a man. That opening, made by the plunders, was left unpaired. Here CARTER noticed the following :

(1) The contents of the Annexe of objects of every description were in utter confusion, and the funerary equipment of the King was ransacked. Not a single object was left untouched, and even the boxes, which were emptied and their contents were strewn upon the floor.

(2) The great majority of vases which contained oils, fat, and ointment were found empty. The ointment placed in thirty four vessels, were not found, except for some drops on the ground. The vessels were almost without lids and the stoppers were tampered with.

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(1) See plates 2,3.

(3) An oil vessel bore the finger print of one of the ancient robbers.

### THE BURIAL CHAMBER

Along the north wall of the antechamber, were two life statues of the King, facing each other across a wall, the greater part of which was covered with plaster. Although the plastered surface of the wall was stamped with the seals of TUTANKHAMON, yet there was a big opening near the bottom made by the robbers(I). It was the burial chamber which appeared in front of CARTER after removing the wall on the sixteenth of February 1923. The chamber was completely taken up with an immense shrine which towered almost to the ceiling and with a space of about 60 cms. only separating it from the walls on all four sides.

Examining the burial chamber or the GOLDEN HALL, CARTER came to these facts :

A — The chamber had never been disturbed. There might have been an attempt to invade the first shrine as there were no seals on its doors, the two great folding doors were found closed only with ebony bolts. But, the three smaller similar shrines inside, had their seals intact upon them.

B — Close to the opening, and between the plastered wall and the large shrine, there were broken portions of necklaces, dropped certainly by robbers who succeeded in getting into the burial chamber. From it, they took their way to the treasury room which was not bricked up or sealed, and its interior was visible from the burial chamber.

I have to add an interesting event which took place during the clearance of the burial chamber. Over the second shrine was a linen pall, brown with age, sewn with gilt rosettes (more than 600). When CARTER began to take away the first shrine out of the tomb, the weight of those rosettes had torn the pall and fell to the ground making a loud strange sound. The workmen were trembled with fear, and some of them tried to fly out of the tomb, thinking that the sound was that of a ghost (2).

### THE TREASURY

The treasury chamber (3), which was not bricked or sealed, included the most precious and important equipment necessary for a King in his world beyond the tomb. Here were deposited the treasures of TUTANKHAMON together with the two mummies of his still-born children, kept in two anthropoid coffins.

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(1) See plate 4.

(2) Through the disturbance, two of the rosettes disappeared. Carter knew that one of workmen had picked them, and were sold to a goldsmith at Armant. CARTER, helped by WINLOCK succeeded in regaining the two rosettes back for 10 Eg. pounds each.

(3) See plate 5.



Meanwhile, the room contained the heirlooms which had been passed down to the King. But, the disorder of the chamber gave evidence to the discoverer that the ancient robbers found their way to the place through the opening made in the wall which once blocked the burial chamber.

The numerous caskets and boxes containing the jewellery were all searched, and the contents were scattered on the floor, so that the robbers could easily pick objects of greater value. No box was left intact, the seals were broken, and some of these boxes were found empty, while others contained one or two objects which escaped from the hands of robbers. CARTER estimated that at least sixty per cent of the original contents had been stolen.

### FINAL OBSERVATIONS

The discoverer stated that the tomb had been robbed on two separate occasions within a short period of the King's death. The first robbery, according to the suppositions of CARTER, was for metal and precious objects while the second robbery aimed at the oils, fats, and ointments, the majority of which were stored in the annexe of the royal tomb. The water-skin which was found abandoned in the descending passage meant that the robbers planned for that second robbery, and that they made their trials for penetrating the royal burial while they were ready with skins into which they could pour the oils.

I have to add, according to my own studies, that the violation of the tomb occurred at least some few years after the King's death, and during the reign of King EYE. The position of the burial place was still known by those who shared in the interment of the King or by those overseers who worked in excavating the tomb and had known well its location.

We should not forget also the state of anarchy which followed the religious revolution of AKHENATON and which continued after his death. Those circumstances gave, to the robbers, the chance to penetrate the royal burial, and it is only at that time that such an act could have taken place at the western Thebes.

The great amount of the precious contents of TUTANKHAMON'S tomb stolen, and the ointments which were poured from the numerous vessels in the Annexe, gave evidence that the violation lasted for some days, and was done by a gang of robbers. The plunderers had evidently been interrupted in their work by the watchmen of the Theban Necropolis, so, they had to rush as quickly as possible from the tomb and to hide some of the objects which they carried. The nearest hiding place was the tomb pit No. 58, so, they stored what they carried in that pit hoping that they might pick them again in a future chance.

While the officials, appointed by the authorities of the Theban Necropolis, were looking into the matter of the robbery, counting the stolen objects in the first hall (the Antechamber), inscribing docketts of the contents of the boxes, and making an attempt to tidy the objects scattered everywhere, they

were ordered to stop their work for unknown reasons. It might be the severe laws issued by King HOREMHEB and his strong rule that led the governor of Thebes of the Dead to stop the inventory of the royal tomb, because, he himself was afraid to be accused for his carelessness, although there is no direct evidence to confirm this supposition. Thus, the seals of the Theban Necropolis had been applied by the royal inspectors, and heaps of debris were thrown over the mouth of the burial.

In fact, the violation of the royal tombs in the valley stopped during the reign of those hard-hitting pharaohs like RAMSES I, SETI I, and RAMSES II, and we can state that the valley with its treasures was kept safe for more a hundred years.

The tomb of TUTANKHAMON must obviously have been forgotten after being once robbed, and must have been lost to sight. It is quite sure that in time of RAMSES V or RAMSES VI, no body knew where the burial place of TUTANKHAMON existed. This fact could be accepted easily owing to the long period between the death of TUTANKHAMON, and the hewing of the tomb of RAMSES V. Meanwhile, we have a clear example that some royal burials in the valley were forgotten after few years only. SETNAKHT, in excavating his tomb (No. II in the Valley of Kings) drove it straight into the tomb of one of his predecessors, King AMENMES. This fact proved that the overseers, in time of SETNAKHT, did not know the location of the burial place of AMENMES who died some few years before the hewing of SETNAKHT's tomb.

At any rate, Ramses V (tomb No. 9 in the Valley) (1) had chosen the same location in which TUTANKHAMON's tomb existed. The entrance of the new burial was hewn out some meters above the entrance of TUTANKHAMON's tomb, and a short distance to the left of it. It is of great interest to state that if RAMSES V had tunnelled his tomb two meters deep, he would have certainly broken the ceiling of TUTANKHAMON's antechamber. All the debris and chips extracted from the newly hewn burial were thrown over the tomb of TUTANKHAMON until it was totally concealed. Moreover, the huts of the labourers who were finishing the work inside the tomb of RAMSES VI, were constructed on the discarded debris mentioned.

Those factors gave no indication to the active robbers of the twentieth Dynasty that a royal burial of the eighteenth Dynasty was hewn in the site under another burial. The tomb of RAMSES VI was robbed, while that of TUTANKHAMON was kept safe for more than three thousand years until it was discovered by CARTER in 1922.

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(1) The tomb was begun for RAMSES V and was usurped and completed by RAMSES VI.



## CONCLUSION

There are yet two points which deserve to be recorded :

- (a) The two trumpets, one in silver and the other in bronze, were found in the royal tomb. They were sounded in April 1939 by an English soldier. The sound was heard through our Broadcasting Station, and the recording made at that time has been broadcasted on several occasions by the B.B.C. The international situation in Europe at that time was critical and getting worse. All the listners who heard the sound of the trumpets prayed and hoped that it would be the sound of peace. On the contrary, the sound was that of war, and within few months the great war set up. It seemed to me that the pharaoh was **annoyed** for the ill treatment of his funerary equipment which is exhibited here and there.
- (b) The Egyptologists of the last century were repeating always that the Valley of Kings was exhausted and that the site would not reward further investigations. Some of them considered the excavations undertaken by CARTER in 1917 in the Valley, as a sort of gamble. But, the hard work and the tenacity of CARTER was rewarded by the discovery of TUTAN KHAMON's tomb.

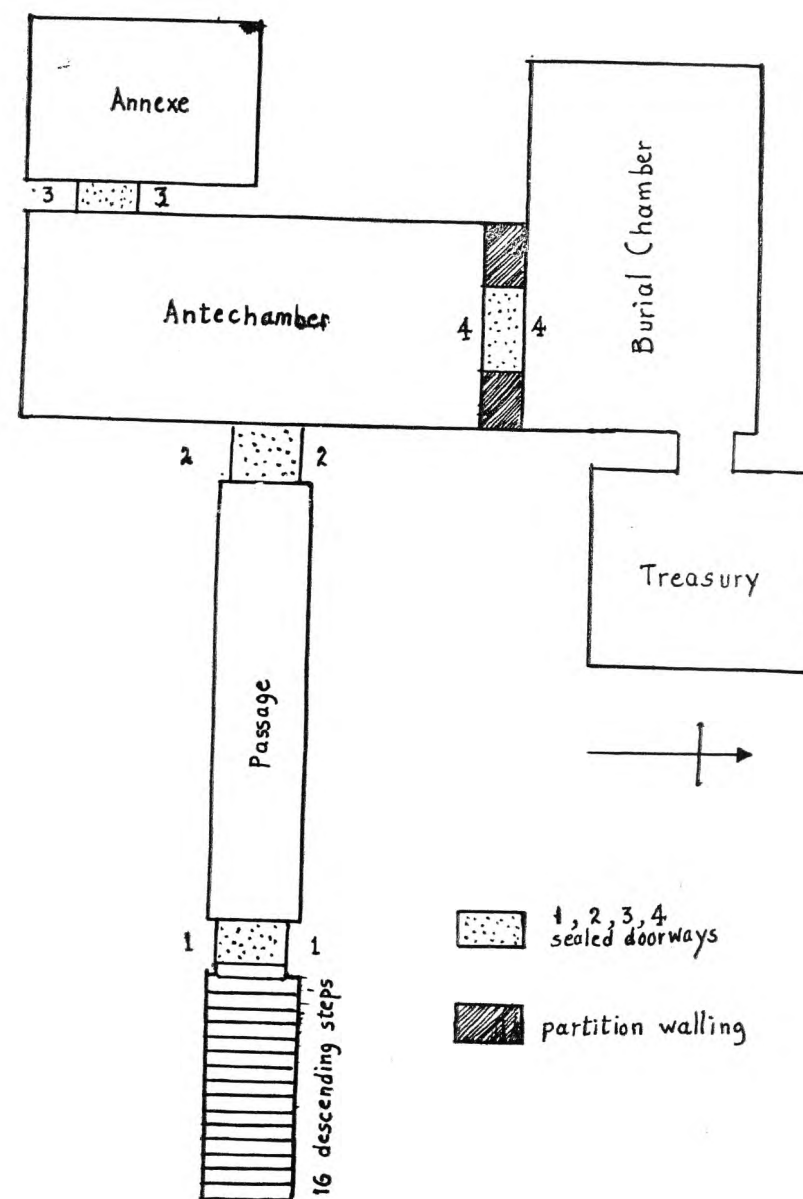
Do we expect a fortunate excavator or a lucky Egyptologist who dares to dig again in the Valley?

There still remains the possibility of finding the tomb of RAMSES VIII (1) or the burial place of the priest Kings of the XXI Dynasty. (2)

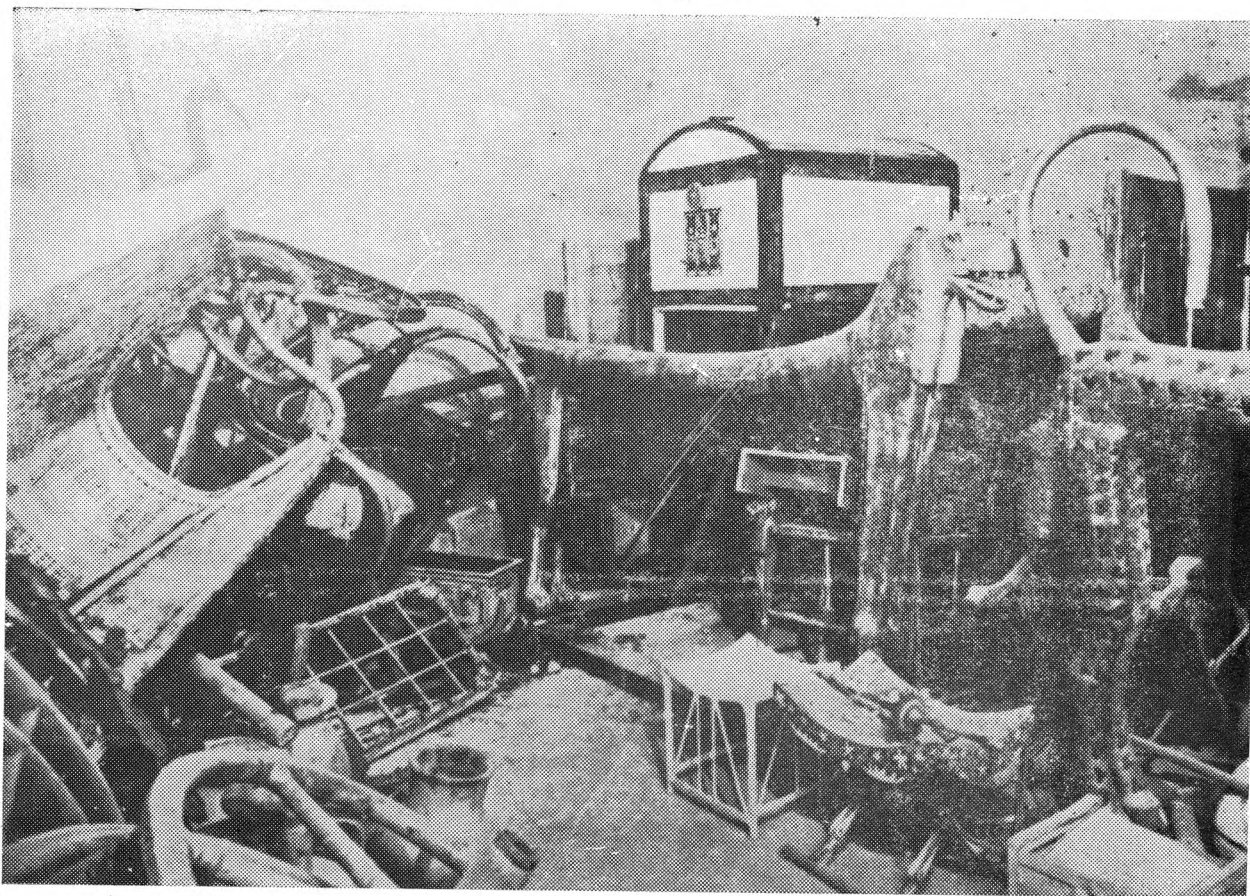
(1) Neither mummy nor tomb had been discovered.

(2) The mummies of some of those Kings were found in the cachet of Deir el Bahari.

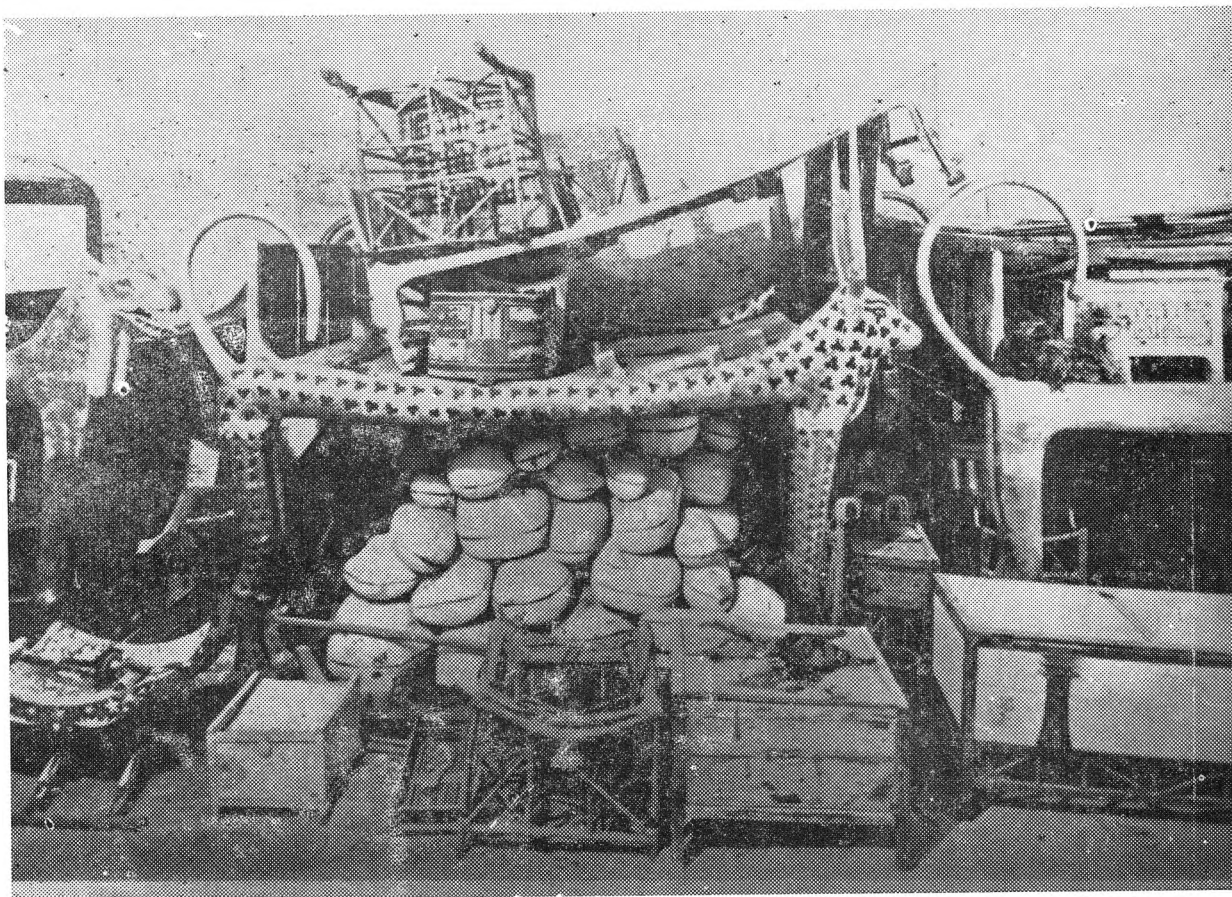
PL. 1



PLAN OF THE TOMB

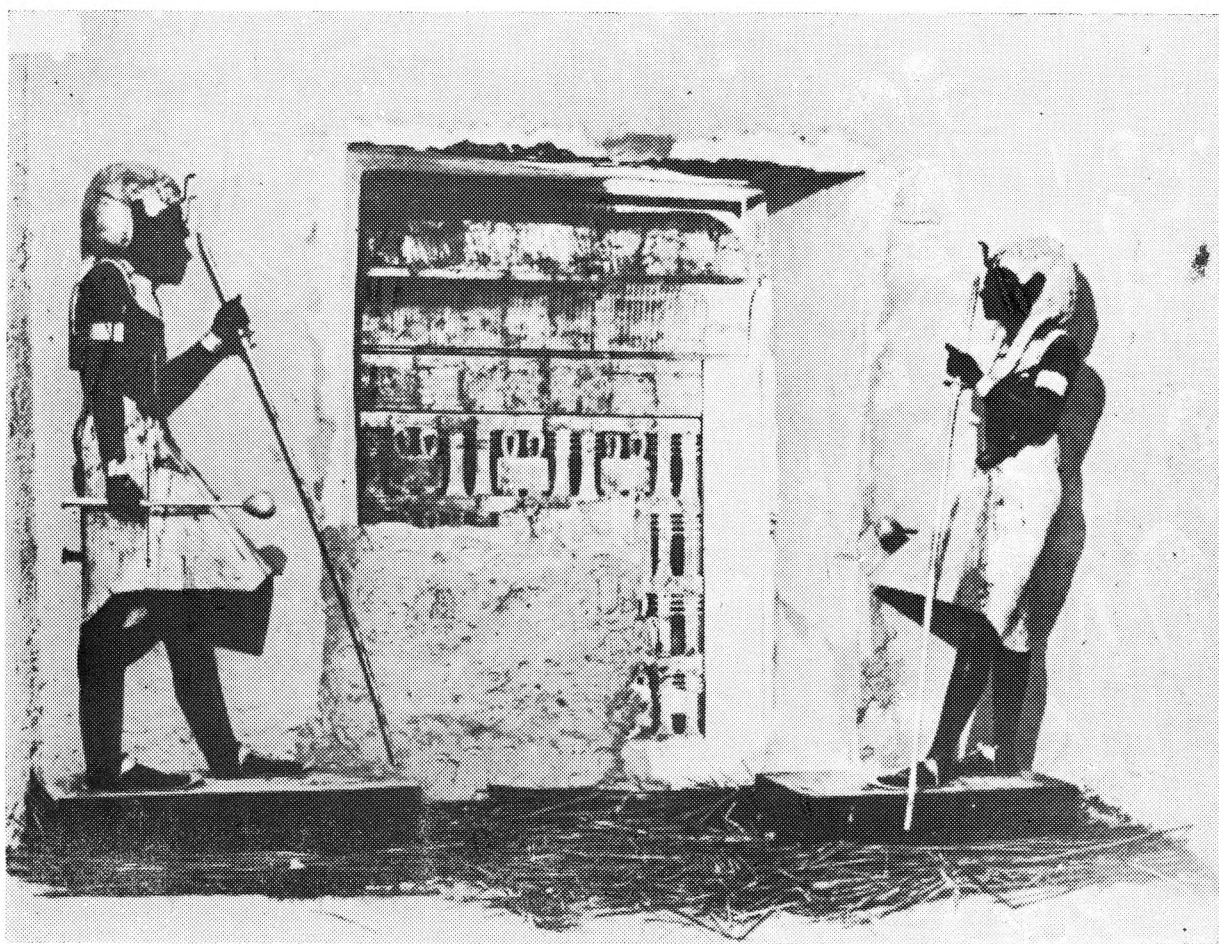


Plates 2, 3 show the Antechamber piled high up with furniture and objets of every kind.

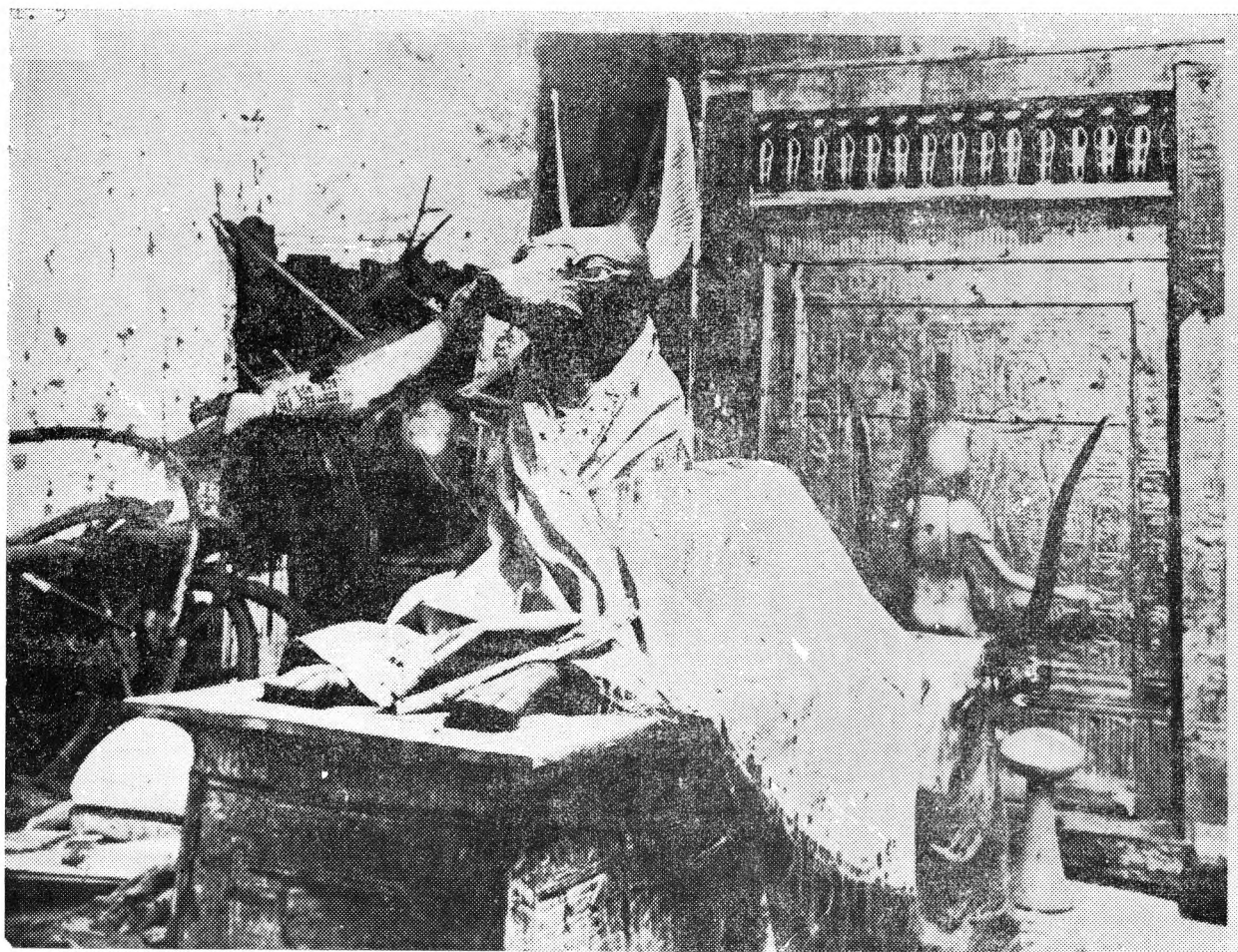


Another view of the ante-chamber.





Plates 4. The big opening made by robbers to penetrate the Burial chamber and the Treasury room. A part of the outer shrine is seen, while the two life statues are in their original places.



Pl. V

Plate 5. The contents of the Treasure room as first seen by the discoverer. The room was not bricked or sealed

SOME REMARKS ON THE TWO MONUMENTS  
FROM MERSA GAWASIS

ALESSANDRA NIBBI

The discovery in 1976-7 by Dr. Abdel Monem A.H. Sayed of some inscribed blocks and ostraca at Mersa Gawasis is an important find and it raises yet again, even if indirectly, the thorny debate as to whether the ancient Egyptians ever went to sea. Dr. Abdel Monem's preliminary publication of the material, affirms that because these texts were found near the sea and were inscribed on anchors and because there are some references to Punt, they prove that this site was an ancient Egyptian port used at the same time as the inscriptions, which he dates to Sesostri I and the Twelfth Dynasty, on the basis of what he calls "a small limestone chip, bearing two half-mutilated cartouches of King Sesostri I (pl. 12 b), a document which enabled me to define the date of the port" <sup>2</sup>

It is not our intention here to underestimate the importance of these finds, but simply to look briefly and objectively at the evidence to see what we may legitimately deduce from it.

Firstly, we must emphasize that Mersa Gawasis is only **one** of the many small bays and inlets along that coast of the Eastern Desert, as anyone who knows the area will confirm. I was fortunate enough to receive permission to visit this site and I was able to see that there is no coral growing at its entrance, which rightly encourages us to think that it may have been used as a harbour at all times. But a **harbour is** a refuge and not necessarily a port, which implies a regular traffic of ships in and out and inevitably also some commercial activity, and the collection of customs duties.

What must be stressed about the Mersa Gawasis is that there is **certainly** no sign of any settlement there from any period, unlike the Wadi Gasus a little further north, which does have the remains of some houses and huts. The Mersa Gawasis has no buildings or structure to indicate a port or dock either. Nor are there the remains of any shrine or temple to suggest a prolonged stay there by the ancient Egyptians, even for the duration of the reign of one Pharaoh. Therefore there are no remains of buildings of any kind, nor of any public stelae or memorials to indicate an Egyptian presence of any duration at all.

If we look at the total sum of what Dr. Abdel Monem found there, we have :

- 1) the personal monuments of two ancient Egyptian officials of the Twelfth Dynasty
- 2) some inscribed small stelae which were found buried and some ostraca, all of unknown date



3) some other material dating from the period after the New Kingdom. This does not constitute a port. We are in danger here of falling into the same temptation as earlier scholars who insisted that the Wadi Gasus<sup>3</sup> was the port from which the ancient Egyptians set out, on the basis of only two stelae that were found there, only one of which mentioned Punt.

The only two complete monuments which Dr. Abdel Monem found at Mersa Gawasis were very probably both burials. Unfortunately for us all, Dr. Abdel Monem was short of time when he worked in this area and he did not make the measurements and details of the two large mounds inside which these monuments were found.

In his report in Arabic to the University of Alexandria who financed his expedition, Dr. Abdel Monem reported<sup>75</sup> a burial wrapped in matting inside the mound of Ankhaw, approximately ten centimetres above the shrine which was made out of seven anchor blocks. This was assumed to be a modern burial, was never studied and the detail is now lost.

The only other monument from this site, dedicated to Antefoker, also seems to be a funerary one. This too consisted of anchor blocks and the photographs of his Plate 15 e and 146 show the space clearly in which a burial might have been situated. However, Dr. Abdel Monem records no burial here. He admits that in this campaign he was anxious to find inscriptions concerning Punt, primarily. So again, we have no detail for this monument.

The importance of these finds, would say, lies in the fact that they are the first indisputably Egyptian burials of officers of the Pharaoh who had died abroad, and who, for some reason which we do not know, could not be brought home for burial, as it seems was the usual practice<sup>3</sup>. We must remember that in pharaonic times these regions were outside the territory of Egypt proper but that teams of Egyptians under the guidance of officials and scribes went into these areas for the purpose of bringing home the valuable minerals and metals which we know were abundant there and which were used in considerable quantity at home. I have already drawn attention to the fact that the Wadi Gasus must be considered as a mining-area and not as a port. I believe that the Mersa Gawasis area was visited for the same purpose.

#### The significance of the anchors

We all owe our recognition as anchors of stones with holes to the important work of Honor Frost. When Bjorn Landström identified some anchors on the Egyptian reliefs, he was basing his recognition on her work, as his Bibliography shows.

It is difficult to find an answer to the question as to why these monuments from the Mersa Gawasis were inscribed on anchor blocks<sup>91</sup>. They are so far unique in this respect, so we have to be cautious<sup>12</sup>.

Perhaps these two particular Egyptian officials had been to sea. If so, I would consider them to be the explanation who prove the rule that this was

not usual on the part of the ancient Egyptians<sup>13</sup>. It is possible that these particular Egyptian officials had been to sea and having died, were given the land burial required by the established religion of that time. It is possible<sup>41</sup> that the anchor blocks had votive and religious significance in this context. We must remember that anchors have now been found in funerary context in Egypt; at Abusir<sup>15</sup> Fifth Dynasty; in the mastaba of Mereruka,<sup>16</sup> Sixth Dynasty, and at Karnak,<sup>17</sup> New Kingdom. Their significance however, is not yet clear.

There is another reason why the monuments from Mersa Gawasis may have been inscribed on anchor blocks. The traditional shape of the stone anchor<sup>18</sup> strongly resembles the traditional shape of the Egyptian stela from earliest times, which is narrower at the top and wider at the base. If the anchors were at hand, ready cut and with good surfaces, they would serve the purpose very well in case of urgent need. The finding of other anchors of various sizes on this site suggests that their use was primarily practical in this geographical context.

A close examination of the two monuments from the Mersa Gawasis shows that there is very decidedly an attempt to reproduce a tomb structure, in miniature. The photographs published by Dr. Abdel Monem A.H. Sayed<sup>19</sup> show this clearly. This, together with the hieroglyphic inscriptions on the stone, so far from home, reflects the existence of a team of qualified people.

Yet the substance of these inscriptions, as far as they can be read, are no different from those which have come down to us from the Wadi Hammamat<sup>20</sup> and from the Sinai<sup>21</sup>. They refer to officials who were sent on the Pharaoh's business in these foreign lands. Even though the surface of these monuments was badly damaged by exposure to the air and other factors, it is unlikely that the complete inscriptions would have yielded anything more dramatic than their remains have done.

There is another consideration which must be raised with regard to anchors in Egypt at this point. At the Second International Congress of Egyptologists at Grenoble, Professor Mahommed Bakr of the University of Zagazig announced the finding of two small, unpolished stone anchors from his site at Tell Basta, which is at present reflecting a Twentieth Dynasty context, although the anchors may be earlier. We look forward to his publication of these. However, this must lead us to think again about the principle that stone anchors were not used in silt. The site of Tell Basta, near Zagazig, is a site that is well in from the Eastern Delta, and on the waterway of the Wadi Tumilat which led from the Nile to Lake Timsah in ancient times. The finding of these small stone anchors on this site, which has also produced Tell El Yahudiyeh ware as well as Philistine material this last year, suggests that they were, in fact, used in the Nile water. They could have been used not only in the Nile silt bed of the waterway, but also on the bank or even in a tree along the way<sup>22</sup>. Being small, approximately eighteen inches high, they have only one hole and are unpolished on both sides.

## The references to Punt from Mersa Gawasis

When the inscriptions from Mersa Gawasis refer to journeys to Punt<sup>23</sup> they are no more enlightening than the other inscriptions which we had before. There are references to Punt from the Wadi Gasus, a little further north, from the Sinai, from the Wadi Hammamat, from the Theban tombs and from Aswan. No-one has suggested that they were all departure points for Punt. Only the Wadi Gasus was thought to be a departure point, and that, as we have said, merely on the basis of *one* stela. We shall need more evidence than we have so far to accept the Mersa Gawasis as Egypt's foreign port, or as a port at all!

No-one has yet proved that Punt lay across the sea from Egypt<sup>24</sup>. How, then, can anyone reasonably assert that this was the port from which the ancient Egyptians sailed to Punt?

There is no evidence that the ancient Egyptians ever went to sea. There are no pictures of the sea in any of the many reliefs and paintings from ancient Egypt. There is no god for the sea in the very extensive ancient Egyptian pantheon which was able to produce a god for the inundation in Hapi.

Nor have we a word for *sea* in the ancient Egyptian language. It was in 1972<sup>25</sup> that I first questioned the acceptance of *w3d-wr* as *sea*, because I was able to find no example where this expression clearly meant *sea* from its context alone. When I again returned to this point in 1975<sup>26</sup> it was surprising to find eminent scholars like K.A. Kitchen<sup>27</sup> and D. Redford<sup>28</sup> saying that I was wrong, without producing a single example to prove their point. This is not scientific procedure and must therefore be unacceptable to all scholars. I can only assume that they were unable to produce the *one* example required to prove me wrong, because there is none.

In a forthcoming study, I state that we must use the same criteria with *ym*, even if it means removing Wenamun from the Mediterranean and placing him elsewhere. This will undoubtedly greatly displease the traditionalists, but we have no choice but to follow the evidence, however uncomfortable this may initially cause us to feel. We shall never succeed in understanding ancient Egypt better unless we take a scientific and rational approach to these very basic problems.

We must apply these scientific criteria also to the new texts from the Wadi Gawasis. If *w3d-wr* does not mean *sea* and *sn-wr*<sup>v</sup> does not mean *ocean* (because they are both treated as nomes on the walls of Deir El Bahari<sup>29</sup>), then the references to Punt must be placed in the slowly-growing *corpus*, which we may some day be able to explain, if we proceed with caution and logic.

## Footnotes

1. *Revue d'Egyptologie* 29 (1977), 140-178. Also *JEA* 64 (1978), 69-71.
2. *Op. cit.* 1977, 150.

3. A. Nibbi, "The Two Stelae from the Wadi Gasus", *JEA* 62 (1976), 45-56.
4. See description *op. cit.* 1977, p. 150.
5. Dr. Abdel Monem has told me on two occasions about this report, though I have not actually seen it. On the occasion of the First International Congress of Egyptology in Cairo, both he and Dr. Munir Basta described their finds to me, and on all these occasions, I urged them to publish the details of their work as soon as possible.
6. It was during this same Congress that it was discovered that these blocks were anchors, while Professor E. Edel, Dr. Abdel Monem and I were looking at the photographs together.
7. *Op. cit.* 1977.
8. A. Nibbi, "Ancient Egyptians in the Sinai", *Palestine Exploration Quarterly* (1977); also "Death in the Sinai", *Göttinger Miszellen* 20 (1976), 31-36.
9. See note 3.
10. *Ships of the Pharaohs* (1970), p. 151.
11. H. Frost, "Egypt and Stone Anchors: Some Recent Discoveries", *Mariner's Mirror* 65 (2), 1979, 137-161.
12. A. Nibbi, "A Fifth Dynasty Anchor from Abusir", *Göttinger Miszellen* 32 (1979); also "A Further Note on the Fifth Dynasty Anchor from Abusir", *Göttinger Miszellen* 33 (1979).
13. A. Nibbi, "Some Remarks on the Assumption of Ancient Egyptian Sea-going", *Mariner's Mirror* 65 (3), 1979, 201-208.
14. See note 8.
15. See note 12.
16. See note 11, p. 144.
17. L. Basch, "Le navire <sup>v</sup>*mns* et autres notes", *Mariner's Mirror* 64 (2), 1978, 99-123, photographs p. 119.
18. A. Nibbi, "Egyptian Anchors", *JEA* 61 (1975), 38-41, being a discussion of the work of Honor Frost in the Egyptian context.
19. *Op. cit.* 1977, Plate 15, d-f.
20. J. Couyat and P. Montet, *Les inscriptions hiéroglyphiques et hiératiques du Ouadi Hammamat*, Mem. Inst. Fr. 34, 1912. Also further inscriptions recorded by Georges Goyon.
21. A.H. Gardiner and T.E. Peet, ed. J. Cerny, *The Inscriptions of Sinai* (1952-55).

23. Op. cit. 1977, 150, 160 ff, *passim*.
24. See note 13. Also forthcoming A. Nibbi, **Ancient Egypt and Some Eastern Neighbours** (Noyes Press, New Jersey), see chapters 5 and 6.
25. A. Nibbi, **The Sea Peoples, A Re-Examination of the Egyptian Sources** (1972).
26. A. Nibbi, **The Sea Peoples and Egypt** (Noyes Press, New Jersey, 1975).
27. Review in **JEA** 64 (1978), 169-171.
28. Review in **Bulletin of the American Schools of Oriental Research** 229 (1978), 74-75.
29. See note 26, pp. 42f.

## EXCAVATIONS IN THE VALLEY TEMPLE OF KING UNAS AT SAQQARA

By  
**AHMED MAHMOUD MOUSSA**

Excavations in the valley temple of King Unas at Saqqara were first carried out by the late Professor Selim Hassan, assisted by the late Mr. Z. Goneim, during the season 1937-38, and brought to light parts of the northern part of the temple(1).

The southern side of the temple was cleared, in 1943-44, by the late Mr. Abdel-Salam Hussein(2).

In 1970 the present writer continued the clearance of the valley temple. Until that time access to the Saqqara necropolis was still reached well over the middle part of the site of the temple, although a new road had already been built. After closing the site for public traffic further clearance was carried out, parts of the original alabaster pavement and traces of a doorway as well as another ramp at the eastern side were found.

The valley temple constructions had once been built on a platform but later were badly damaged to the result that many parts of the casing are lost. We then partly restored this platform. It extends about 39m. from east to west and about 54 m. from north to south and consists of three terraces, each reached via a ramp (Fig. 1). The first terrace, with sandstone bases in situ, is facing north. The second one, with two granite columns reconstructed by Dr. M.A. Raslan (3) and Dr. M. Yacoub (Pls. I a,b; II a), is facing south. The third is facing east, with a ramp directed to the east 15m. long and 3.10m. broad (Pls. II b; III a).

The debris outside the temple platform still contained fragments of columns, some rough blocks of limestone belonging to the masonry of the temple and various inscriptions of different periods.

Most probably the original temple had a high facade facing east and, built into it, the main entrance consisting of a portico with large cylindrical columns with palmleaves capitals. From this portico and in the axis of the temple a ramp, flanked by parapets connected with those bordering the terrace, descended to the base of the platform. The ramp then presumably led directly or by means of an additional road to a canal which joined the Nile and was navigable throughout the year. The terrace immediately in front of the eastern temple wall might have had at its eastern side a portico with the cylindrical granite columns which one had to pass in order to enter the temple area and which one could reach by climbing a ramp. The way then proceeded to the above mentioned western main portico and further, through a doorway, to the main hall of the valley temple (Pl. III b).

The two further porticos, in the north south axis and facing north respectively south led into the hall and again were marked by two columns. To



the west of these side porticos further high walls are running north south (the northern one at a length of 66 m.; the southern one only 8 m. cleared by now).

All sides of the temple platform have thus been defined, while many questions concerning the different building materials used are not yet settled. We can only say that the floor of the two side porticos is built in white limestone and that the southern palmiform columns consist of granite, while the northern ones, strangely enough, are of sandstone.

Due to excessive quarrying already in ancient times many details of the inner parts of the valley temple will remain unrevealed.

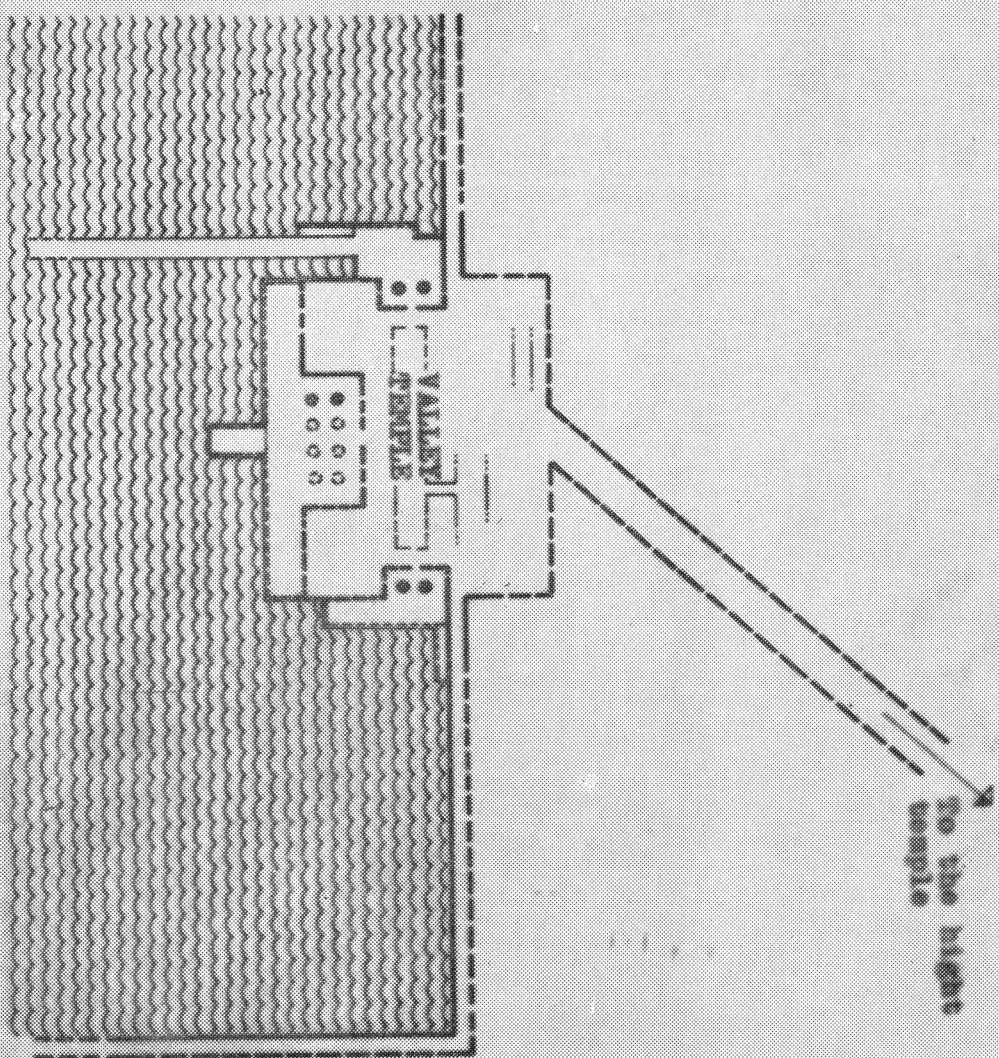
From the numerous monuments brought to light by our excavations in the valley temple the following may be mentioned here:

- 1 — A statue group of limestone, was found 1972 (Pl. IV), belong to a man called Sr-maat and his wife Hnmt, devoted to the cult of King Unas at the end of the 12th dynasty(4), and registered under No. 16556. Saqqara.
- 2 — Limestone block depicting on one face a man, with the upper part of the head and the lower half of the body missing, while on the other face a woman with headdress, also the lower part of the body missing (Pl. V a, b).  
The relief is a type of the New Kingdom, about 40 x 32 x 21 cm., and registered under No. 16893, Saqqara.
- 3 — Limestone block, depicting two women and a man wearing long garments about 39 x 48 x 23 cm., (Pl. VI). The relief is a type of the New Kingdom, and registered under No. 16894. Saqqara.
- 4 — A statue-block of limestone, representing a man sitting with his knees in front, but the head and hands are missing, belong to a man called Ankhw, about 48 cm. high, (Pl. VII a,b,c). The statue is of a type exceedingly common in the 12th dynasty and thereafter, and registered under No. 16896. Saqqara.
- 5 — Memphite decorated limestone block from the New Kingdom, bears a representation of a man sitting on a stool, with the wife sitting behind him, (Pl. VIII a).  
The man called Ptah-maay, and the wife called Ta-khati(?), about 36 x 24 x 10cm., and registered under No. 16902. Saqqara.
- 6 — Limestone block, bears the lower part of a man and a woman sitting on stools with a part of a name...ms, about 23 x 67 x 10 cm., (Pl. VIII b), and registered under No. 17002. Saqqara.
- 7 — Limestone block, bears a part of a hand holding the sign 'Ankh, about 30 x 30 x 12 cm., (Pl. IX), and registered under No. 16940. Saqqara.
- 8 — Limestone block, bears inscriptions, with figures of Ptah, Soker and the owner's good name Bb-ib, about 38 x 19 cm., (Pl. X), and registered under No. 16999. Saqqara.

- 9 — Memphite decorated limestone block of Amarna Period, depicting a craftsman holding a sward, about 56 x 15 x 32 cm., (Pl. XI), and registered under No. 17005. Saqqara.
- 10 — Limestone block, depicting on one face a scene of two human-headed falcon 'Ba', on 'Dd-pillar', on the other two faces are inscriptions, about 45 x 34 x 20cm. (Pl. XII a,b,c), and registered under No. 17006.
- 11 — Limestone block, depicting a cow with some inscriptions, about 49 x 32 x 22 cm., (Pl. XIII), and registered under No. 17021.
- 12 — Lintel-block of Memphite New Kingdom tomb, depicting a man kneeling and figures of different dieties, about 92 x 31 x 17 cm., (Pl. XIV). The man called Pay, and registered under No. 17022. Saqqara.
- 13 — Limestone block, depicting a part of a funeral scene, about 49 x 17 x 38 cm., (Pl. XV), and registered under No. 17024. Saqqara.
- 14 — Limestone block, depicting part of a body of a lady with her hand holding the sign 'Ankh', probably Old Kingdom, about 71 x 75 x 12 cm., (Pl. XVI), and registered under No. 17026. Saqqara.
- 15 — Different types of pottery vases, and registered under Nos. 17403 to 17413; 17516 to 17749. Saqqara.
- 16 — A type of pottery vase, 15 cm. high (Pl. XVII), and registered under No. 17750. Saqqara.
- 17 — A figure of Isis suckling her son Horus is made of faience (Pl. XVIII). 19cm, high, The figure belongs to the Late Period, probably to the 30th dynasty, and registered under No. 17761. Saqqara.

#### Notes:

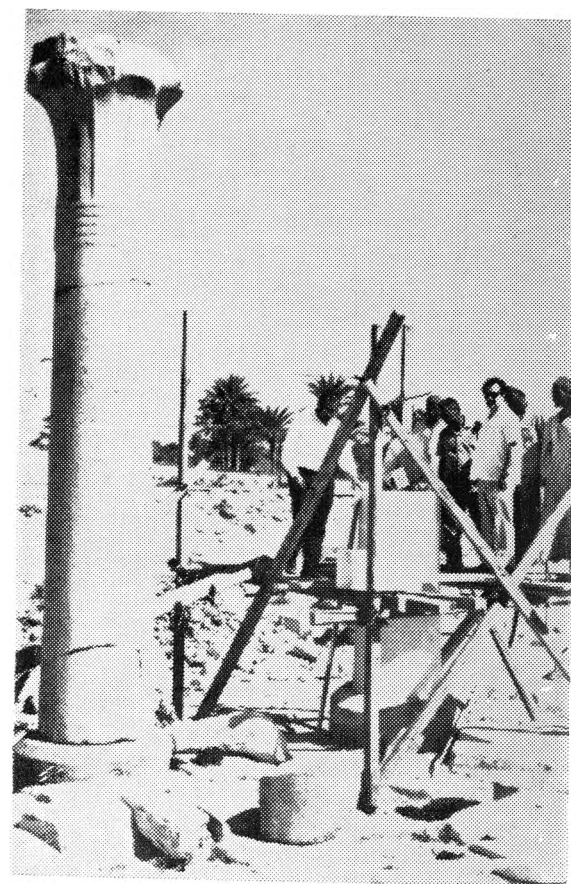
1. S. Hassan, Excavations at Saqqara (1937-1938), ANNALES DU SERVICE DES ANTIQUITES DE L'EGYPTE, XXXVIII, p. 420-521.
2. A preliminary note on the discovery of a sarcophagus and the objects found in it, has been published by Mr. Drioton, "La ceinture en or", in Bulletin de L'Institut d'Egypte, t. XXVI, p. 77; G. Brunton, The burial of prince Ptah-Shepses at Saqqara, ASAE, XLVII, p. 125-133; J. PH. Lauer, Saqqara, p. 155-156.
3. M.A. Raslan, Academic and applied paper on the history of architecture, the causeway of Ounas pyramid, ASAE, LXI, p. 151-169.
4. Ahmed M. Moussa, H. Altenmüller, Ein Denkmal zum Kult des Königs Unas am Ende der 12. Dynastie. Mitteilungen des Deutschen Archäologischen Instituts. Abteilung Kairo, Band 31, I (1975), 93-97.



0 10 50 M

North



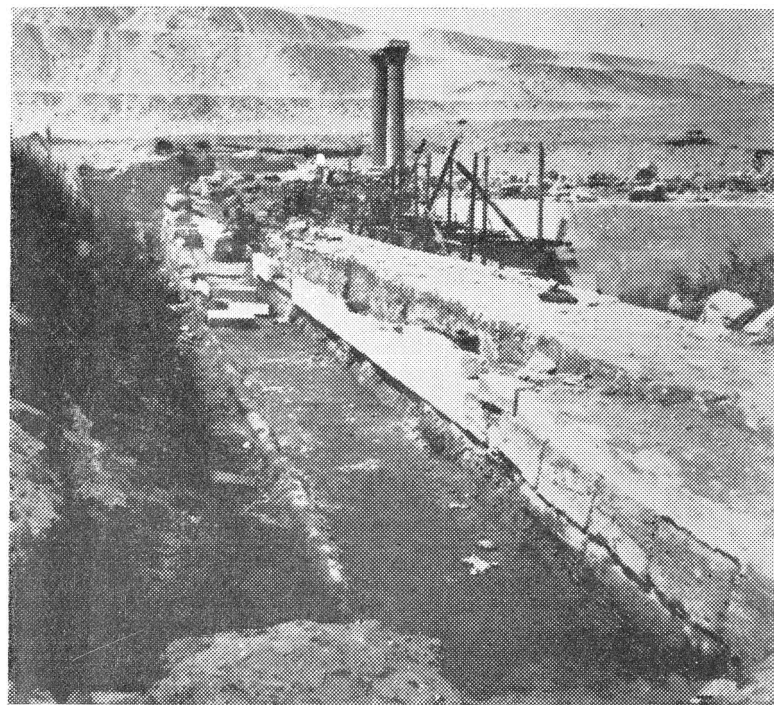


a, The southern entrance, during the reconstruction.

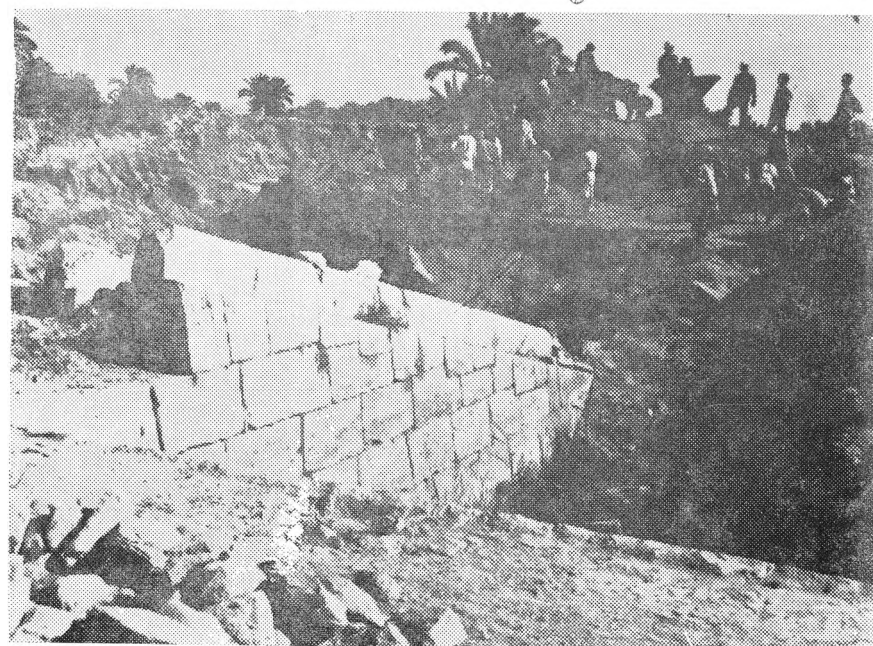


b, General view of the site of the valley temple.





a, The southern side of the valley temple during reconstruction.



b, The eastern ramp, during the clearance.



a, General view of the site of the valley temple.



b, Parts of the pavement.

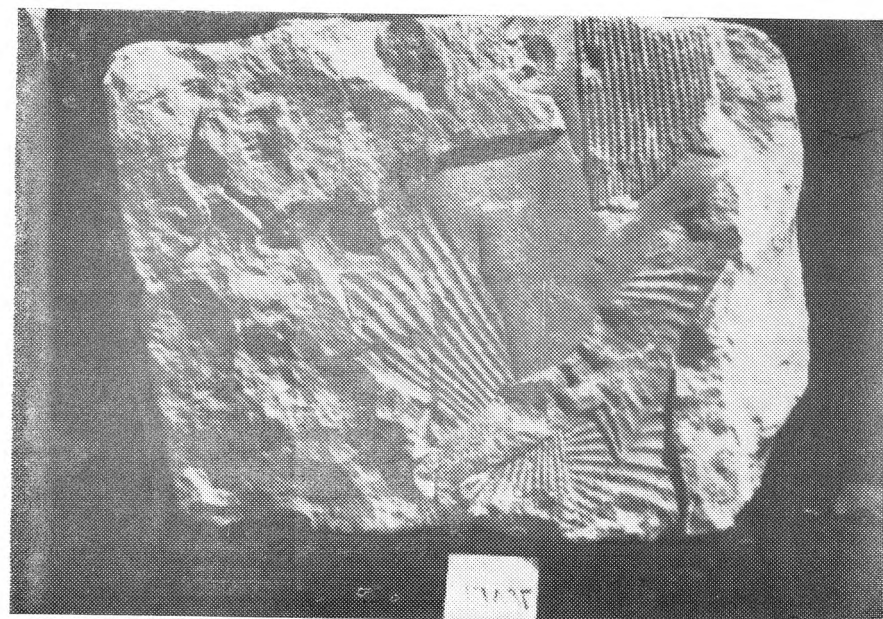


The statue group of Sr-maat, on discovery.  
(16556. Saqqara)





a, 16893, Saqqara.



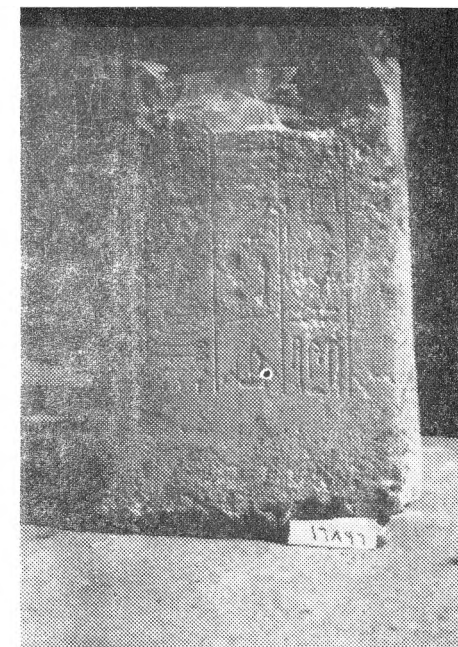
b, 16893. Saqqara.



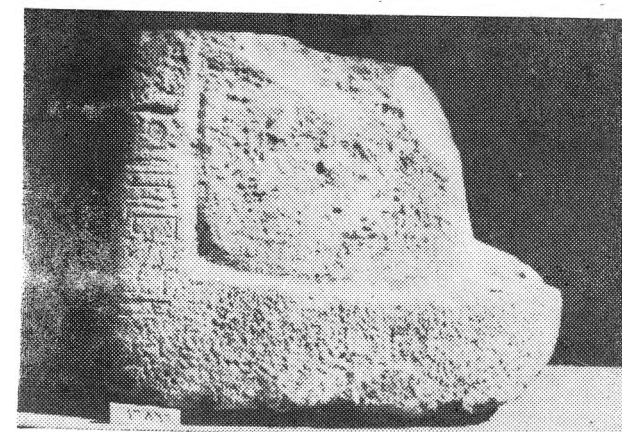
16894. Saqqara.



a, 16896 Saqqara



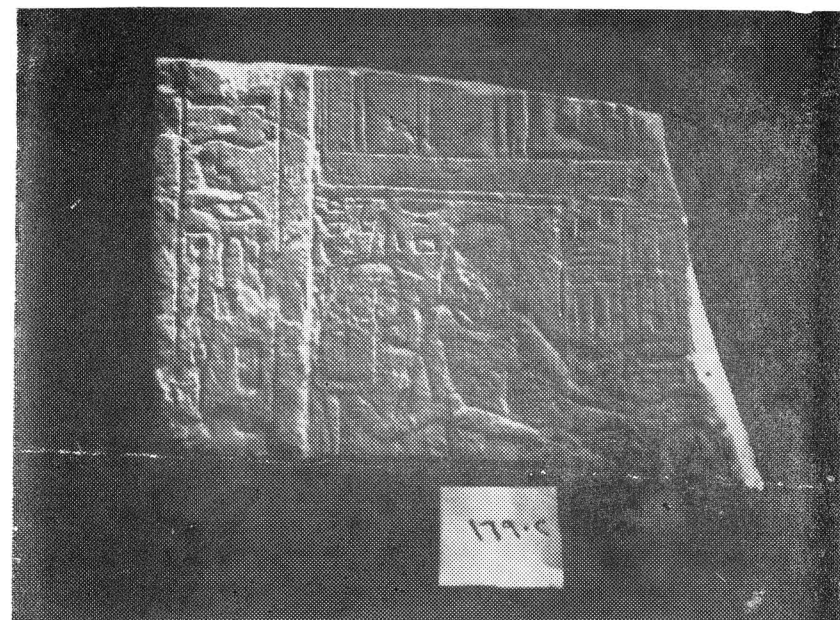
b, 16896. Saqqara.



c, 16896. Saqqara.



a

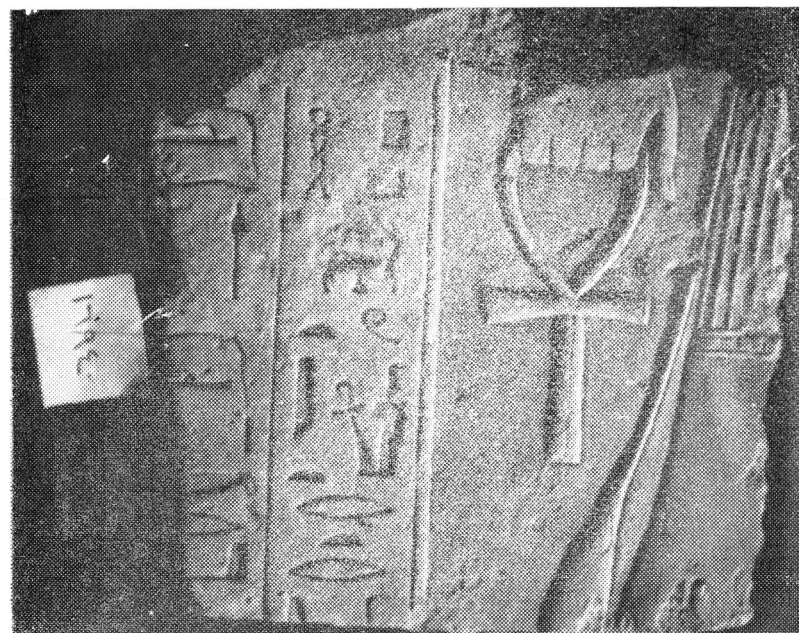


a 16902 Saqqara.

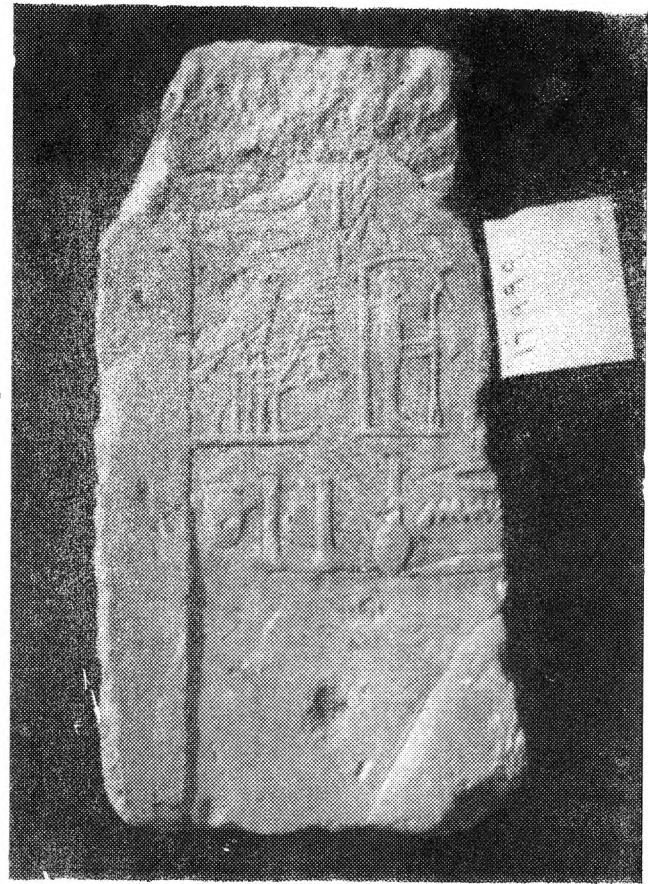
b



b, 17002. Saqqara.

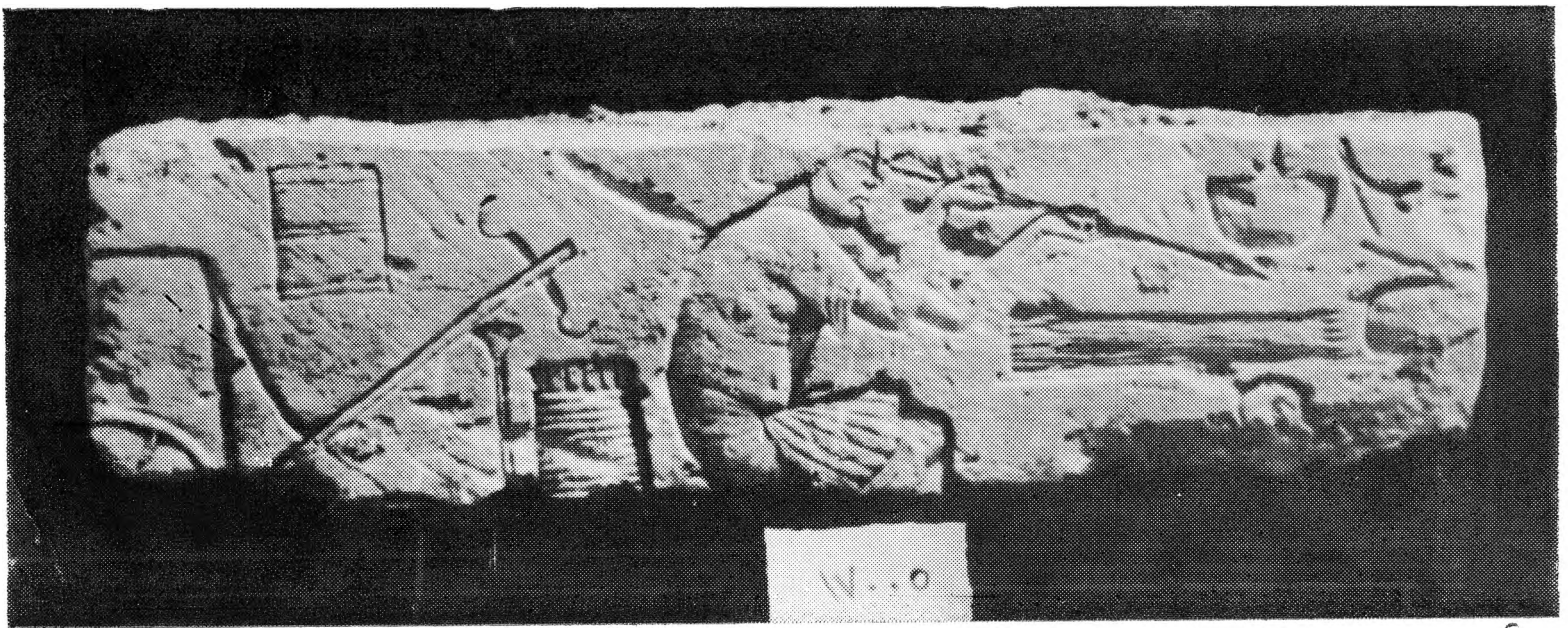


16940. Saqqara.



16999. Saqqara.





17005. Saqqara.



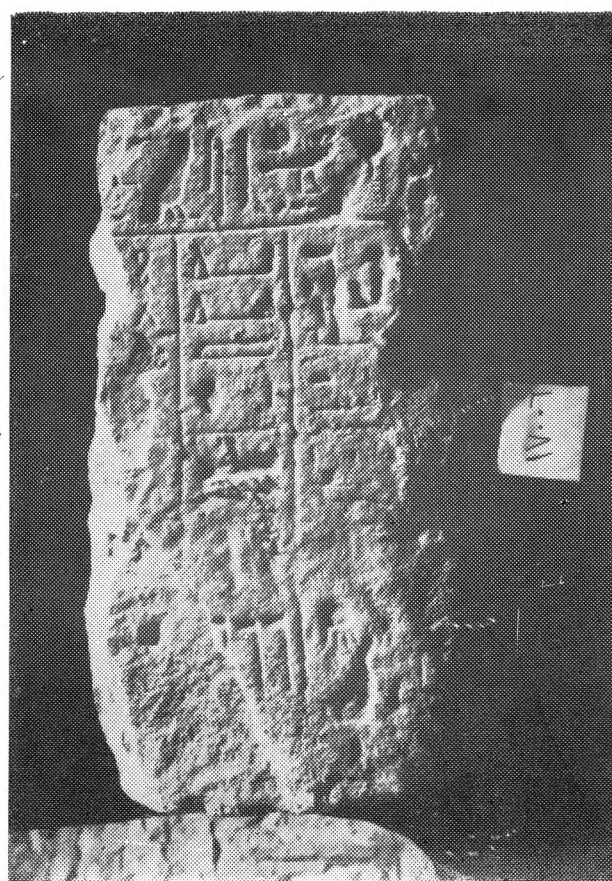
a, 17000 - Saqqara.

Pl. XII b



b. 17006 Saqqara.

Pl. XII. C.

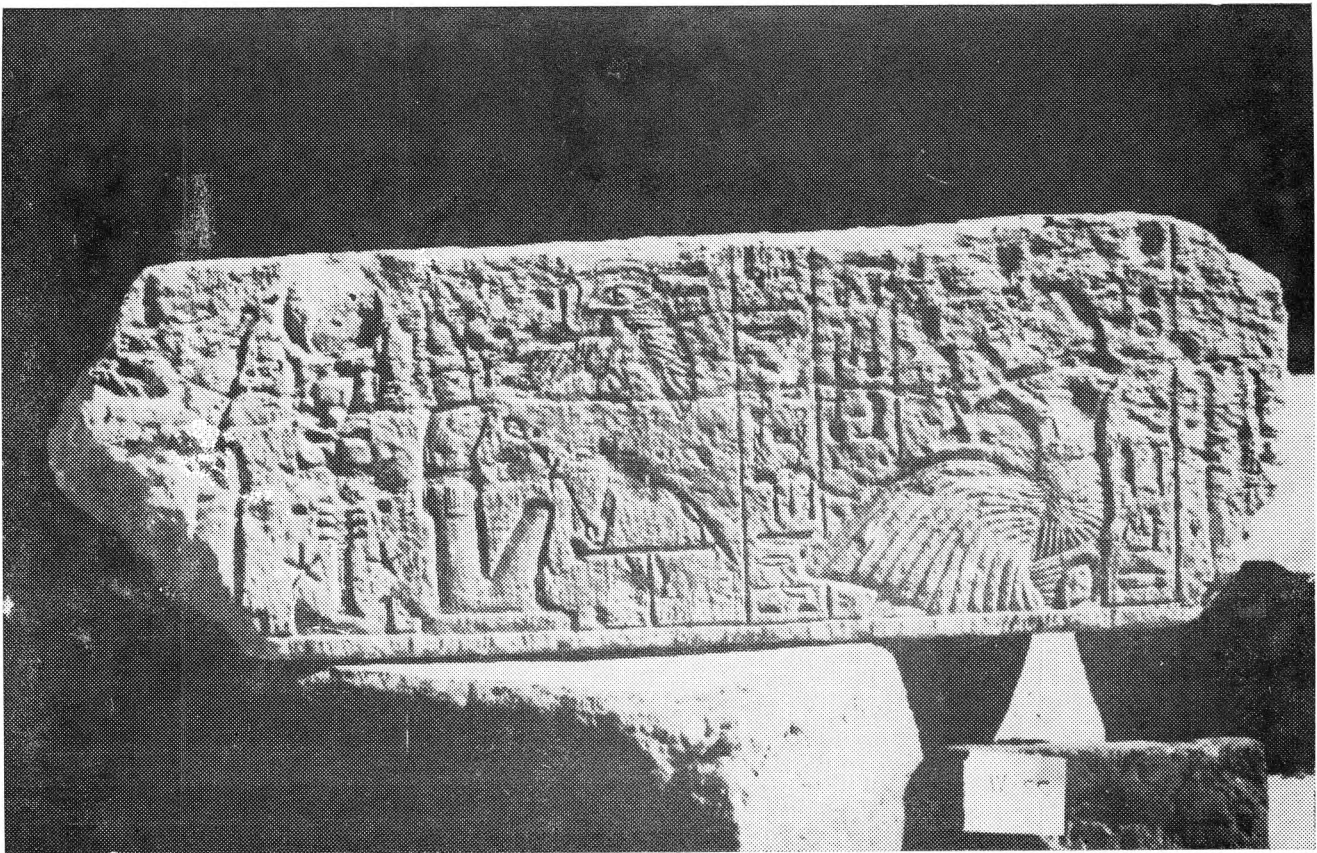


c) 17006 Saqqara



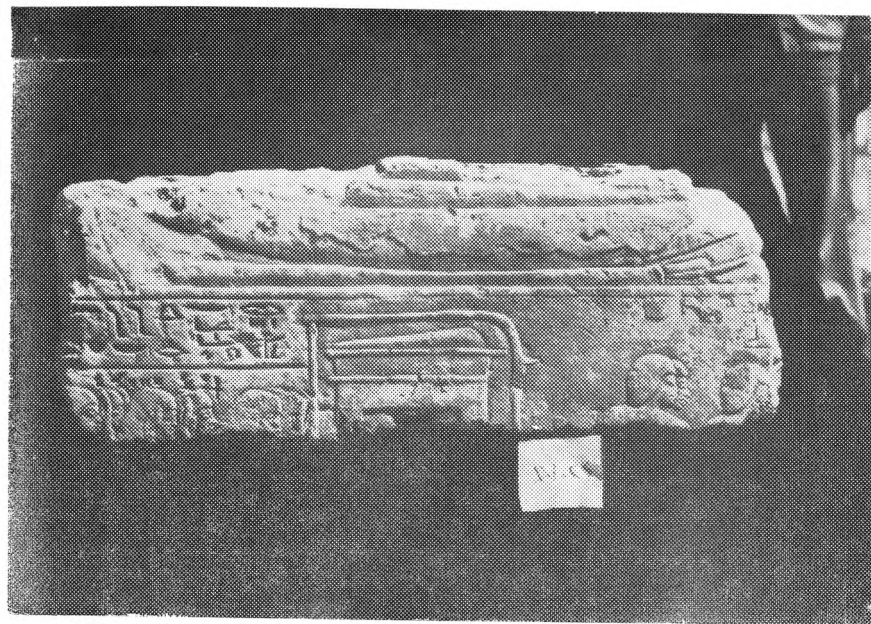


17022. Saqqara.



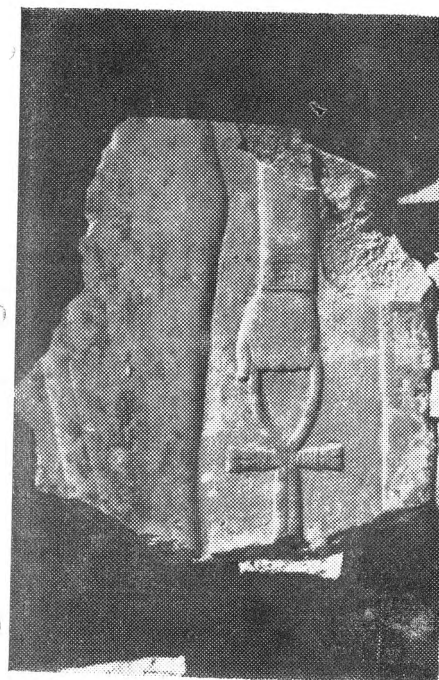
17021. Saqqara.

XV



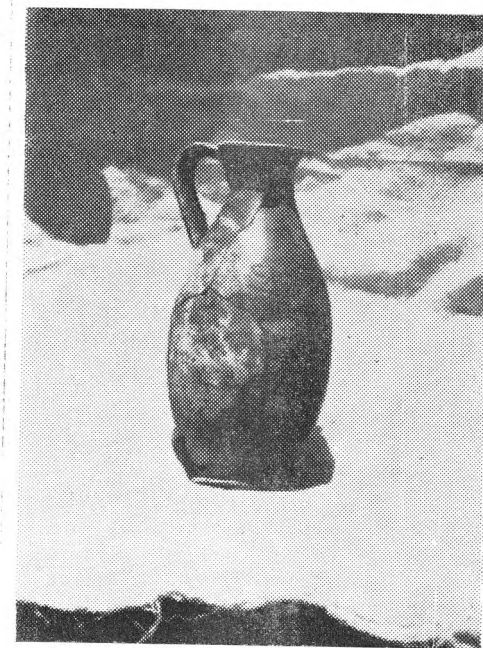
17024 Saqqara

XVI



17026. Saqqara.

XVII



17750. Saqqara.





17761. Saqqara.

**KLASSISCHE ALTERTUMSWISSENSCHAFT GESTERN UND  
HEUTE, AUS DER SICHT EINES BÜRGER DER DEUTSCHEN  
DEMOKRATISCHEN REPUBLIK**

By

**Prof. Dr. JOHANNES IRMSCHER**

In der Reife des Alters, am 7. Mai 1823, schrieb Goethe an den preussischen Hofrat Christoph Ludwig Friedrich Schult : «Die Brosamen von dem reichen Tische der Alten sind es doch eigentlich, wovon ich lebe», und sieben Jahre später, am 30. Juli 1830, äusserte er sich gegenüber dem Dresdener Lehrer Karl Julius Sillig : «Wir würden ja noch in der Barbarei leben, wenn nicht die Überreste des Altertums in verschiedener Gestalt vorhanden waren». Am 31. Januar 1827 notierte der treue Begleiter Johann Peter Eckermann : «Im Bedürfnis von etwas Musterhaftem müssen wir immer zu den alten Griechen zurückgehen, in deren Werken stets der schöne Mensch dargestellt ist», und ganz im Sinne dieses Diktums findet sich in den nachgelassenen «Maximen und Reflexionen» der Wunsch, dass «das Studium der griechischen und römischen Literatur immerfort die Basis der höheren Bildung bleiben» möge. Was einen solchen Wunsch stimulierte, kann einer Bemerkung im Tagebuch der italienischen Reise vom 6. Januar 1887 entnommen werden. Das klassische Altertum erscheint dort als «die Sonne höherer Kunst und reiner Menschheit», eine Aussage, die in noch stärker zugespitzter Form in der Einleitung zur Rekonstruktion des Euripideischen «Phaethon» von 1832 wiederholt wird : die Antike sei der Ort, «wo ganz allein für die höhere Menschheit und Menschlichkeit reine Bildung zu hoffen und zu erwarten ist». Es liegt in der gleichen Richtung, wenn Goethe in den Tag- und - Jahres-Heften von 1817 Griechenland als das einzig menschlich gebildete Land bezeichnet und er am 9. Oktober 1828 wiederum gegenüber Eckermann erwähnte, dass er «nur in Rom empfunden habe, was eigentlich ein Mensch sei».

Es soll im folgenden von der Wissenschaft die Rede sein, die um die Aufhellung der Antike und ihre Erschliessung für die Gegenwart bemüht ist : von der klassischen Altertumskunde im allgemeinen und insbesondere der klassischen Philologie, welche die literarische Hinterlassenschaft und das kulturelle Erbe der Griechen und Römer zum Gegenstand hat. Bereits aus dieser Begriffsbestimmung wird deutlich, dass jene Wissenschaft vom klassischen Altertum sich nicht damit begnügen kann, Vergangenes zu durchforschen und darzustellen, sondern dass sie gleichermassen der humanistischen Aufgabe verpflichtet ist, mit den Kenntnissen, die sie bereithält dem Neuen. Vorwärtsweisend in der eigenen Zeit zum Siege zu verhelfen. Es ist daher kein Zufall, dass die klassischen Studien besonders in den Epochen

revolutionärer Umwälzungen erblühten, während sie nur allzu bald in epigonenhaftes Antiquarium versanken, wenn sie ihr gesellschaftliches Engagement preisgaben.

Die Anfänge der modernen Altertumswissenschaft liegen in der Zeit der Renaissance, der Epoche der Wiedergeburt der Antike, deren revolutionierende Wirkung nicht besser als mit Friedrich Engels' Worten gekennzeichnet werden kann: «In den aus dem Fall von Byzanz geretteten Manuskripten, in den aus den Ruinen Roms ausgegrabnen antiken Statuen ging dem erstaunten Westen eine neue Welt auf, das griechische Altertum; vor seinen lichten Gestalten verschwanden die Gespenster des Mittelalters». Besinnung auf die altrömische Vergangenheit stärkte das Nationalgefühl des frühbürgerlichen Italiens, philologische Quellenkritik rüttelte an historischen Ansprüchen der Kirche, mit der Waffe des Platonismus attackierte man das scholastische System. In Deutschland entfaltete sich die frühbürgerliche Revolution im Zeichen der kirchlichen Reformation; die gegen die klerikale Tradition gerichtete Forderung, auf die biblischen Quellen zurückzugehen, verlebendigte das Griechische, das im abendländischen Mittelalter in Vergessenheit geraten war — in dem von Philipp Melancthon gestalteten Bildungswesen hatte es fortan einen festen Platz. Allerdings eliminierte diese Humanistenschule nur allzu bald die dem antiken Erbe innewohnen, den, auf umfassende Veränderung drängenden Elemente und machte allein die formale Bildung zum Ziel der Erziehungsgenau so wie die kirchliche Umgestaltung aus einer revolutionären Volksbewegung zur Fürstenreformation im Dienste des feudalen Obrigkeitsstaates umgemünzt worden war. In der auf die Studierstube beschränkten Fachwissenschaft entstanden dickleibige Folianten, in denen als Ergebnis bienenfleissiger Arbeit Erklärungen zu den klassischen Schriftstellern und Fakten aus allen Bereichen des antiken Lebens festgehalten wurden.

Die neue Offensive des dritten Standes vollzog sich im Zeichen der Aufklärung, je nach dem Stande der ökonomischen, politischen und kulturellen Entwicklung in den einzelnen Ländern in unterschiedlichen Formen. Namentlich in Frankreich wusste man die Antike den Forderungen der erstarkenden Bourgeoisie unterzuordnen. Die bestehende Gesellschaft erschien im Geschichtsbild der französischen Aufklärer als eine ungeheuerliche Ansammlung von Missbräuchen, als eine schändliche Abweichung von der Norm staatlicher Ordnung, wie man sie in der römischen Republik wiedererkennen zu können glaubte; sie gelte es daher durch einen revolutionären Akt zu restituieren. Nach antikem Vorbild kleideten sich zum äusseren Zeichen dessen die konsequentesten Vertreter des aufklärerischen Gedankengutes, die Pariser Revolutionäre, die in den römischen Republikanern Brutus, Cato, Cicero ihre Vorbilder verehrten.

Die Rationalität der Aufklärung, die humanistischen Forderungen der französischen Revolution nach Freiheit, Gleichheit und Brüderlichkeit und nicht zuletzt die Neubesinnung auf Natürlichkeit, Ursprünglichkeit und Schlichtheit, wie sie sich in den besten Werken der antiken Literatur und Kunst niederschlugen, führten die Klassik herauf, die im Empire français vollbewusst in Parallele zu der antiken Entwicklung gestellt wurde: Auf die Republik sollte das Kaisertum, auf die Epoche der Revolution das weltumspannende Imperium folgen, in dem wie einst im Reiche des Augustus die Künste in vollentfalteter «klassischer» Form erblühten.

Im staatlich zersplitterten Deutschland wirkte von den beiden Komponenten der Antike weniger die durch eine kraftvolle Staatsidee gekennzeichnete römische als vielmehr die hellenische, die das Künstlerische betont, nach theoretischer Grundlegung strebt, aber mitunter auch der Gefahr nicht entgeht, einem idealischen Utopismus zu erliegen. Johann Joachim Winckelmann wurde unter solchen Zeichen zum Ästhetiker und Historiker der griechischen Kunst, auf Aristoteles, dem «universellsten Kopf» des Altertums, wie Engels ihn nannte, fusst die dramatische Theorie Gotthold Ephraim Lessings, Johann Gottfried Herder erklärte die einzigartige Stellung des Griechentums in der Entwicklung der Humanität, Friedrich Gottlieb Klopstock nannte sich selbst einen «Lehrling der Griechen», Christoph Martin Wieland, Friedrich Schiller und nicht zum letzten Goethe, von dem unsere Überlegungen ihren Ausgang nahmen, fügten griechische Gedanken, Figuren und Formen in deutsche Gestalt und machten sie so zum unverlierbaren Besitztum der Nation. Verbreitung ihrer Ergebnisse und altertumskundliche Forschung gingen Hand in Hand, und das durch Wilhelm vom Humboldt geprägte Gymnasium liess in ganz Europa das klassische Erbe zum schlechthinnigen Bildungsgut der Bourgeoisie werden. Das lag, wie die eingangs vorgetragenen Zitate zeigen, durchaus im Sinne Goethes, der zu Fachgelehrten seiner Epoche in engen Bindungen stand: den universalen, auch als Wegbereiter des Bibliothekswesens bedeutenden Christian Gottlob Heyne in Göttingen wusste er hoch zu schätzen, zu dem Homerforscher Friedrich August Wolf hielt er enge Freundschaft, mit dem Althistoriker Barthold Georg Niebuhr stand er in Briefwechsel, von dem Uebersetzer Johann Heinrich Voss rühmte er, dass nur wenige «auf die höhere deutsche Kultur einen solchen Einfluss gehabt» hätten, der Philologo Friedrich Wilhelm Riemer lebte neun Jahre lang in Goethes Haushalt; er und der Jenaer Professor Götting waren von dem Dichter mit der Herausgabe seiner Werke betraut. So wurde die Verbindung der Personen zum Symbol für die feste Einheit, zu der sich in der deutschen Klassik die Hinterlassenschaft des griechisch-römischen Altertums und die künstlerische und denkerische Leistung der eigenen Epoche zusammengefunden hatten.



Karl Wilhelm Göttling gehörte 1841 zu den Mitgliedern der Jenaer Fakultät, welche Karl Marx zum Doktor der Philosophie promovierte. Das war Zufall, kein Zufall dagegen war die Wahl des Marxschen Dissertationsthemas: An der Untersuchung der unterschiedlichen Naturauffassungen der antiken Materialisten suchte der Doktorand mit der Hegelschen Philosophie ins reine zu kommen, stiess er zu dem grössten griechischen Aufklärer vor, als den er Epikur erkennt. Programmatisch stellt er in der Vorrede der Abhandlung den Feuerbringer Prometheus heraus, den Blutzegen der Freiheit, Feind der Götter und Freund der Menschen. In ihm, dem vornehmsten Heiligen und Märtyrer im philosophischen Kalender, sieht sich Marx selbst verkörpert, und durchaus berechtigt stellte ihn nach dem Verbot der «Rheinischen Zeitung» eine Flugschrift allegorisch als gefesselten Prometheus dar.

Nicht anders als Marx war Engels in den Antikevorstellungen des Humboldtschen Neuhumanismus aufgewachsen, und mochte auch die Beschäftigung mit dem klassischen Altertum in seiner Frühzeit gegenüber anderen Anliegen zurücktreten, so war sie in seinen späteren Lebensabschnitten umso umfassender und tiefer. Schwerer indes als solche formale Einflüsse wiegt die Tatsache, dass die Begründer des wahrhaft weltverändernden wissenschaftlichen Sozialismus jenes Kulturreiche hochschätzten und ihm in ihrem politischen System und damit in der neuen sozialistischen Kultur einen festen Ort gaben. Das geschah zum Teil in Wendungen, die an die eingangs zitierten Goetheschen anklängen.

So reflektierte Marx in 1857 niedergeschriebenen, von ihm selbst nicht mehr zum Druck gebrachten Bemerkungen über das unegale Verhältnis der Entwicklung der materiellen Produktion gegenüber der künstlerischen, das im alten Griechenland besonders augenfällig wurde, weil die künstlerischen Erzeugnisse jener geschichtlichen Kindheit der Menschheit, wie der Autor sagt, «ewigen Reiz ausüben», «für uns noch Kunstgenuss gewähren und in gewisser Beziehung als Norm und unerreichbare Muster gelten». Auf die Bedeutung der Philosophie der Griechen insbesondere auch für die moderne Naturwissenschaft wies Engels in der sogenannten alten Vorrede zum «Anti-Dühring» hin als eine der Listungen «jenes kleinen Volks, dessen universelle Begabung und Betätigung ihm einen Platz in der Entwicklungsgeschichte der Menschheit gesichert» habe, «wie kein andres Volks, ihn je beanspruchen kann». Zusammenfassend vermag er daher zu konstatieren: «Ohne die Grundlage des Griechentums und des Römerreichs» «kein moderner Sozialismus»! Und folgerichtig stellt er weiter fest, dass die Kenntnis der alten Sprachen «über den beschränkten nationalen Standpunkt» erhebe und einen «erweiterten Horizont» eröffne.

Angesichts solcher Voraussetzungen braucht es nicht zu verwundern, dass die Antike, dass das Erbe der Griechen und Römer sich auch

heute noch also lebendig und wirksam erweist, ja dem aufmerksamen Beobachter vermag nicht zu entgehen, dass sich das klassische Altertum seit einigen Jahren sogar recht vernehmlich zu Worte meldet. Am sichtbarsten geschieht das auf unseren Bühnen, welche Stücke der drei grossen attischen Tragiker des 5. Jh., des archaischen Aischylos, des vollkommenen Klassikers Sophokles und des kühnen Neuerers Euripides sowie des Meisters der Alten Komödie, des Aristophanes, bald in Uebersetzungen des Urtextes, bald in freierer Bearbeitung oder auch in sinnreicher Nachdichtung aufführen, um — so paradox es klingen mag — auf diesem Wege Gegenwartsprobleme zu veranschaulichen. Andere antike Literatur wirkt zuvörderst durch das Buch, und mit dem zunehmenden Angebot wächst der Freundeskreis des klassischen Schrifttums in der Deutschen Demokratischen Republik. Das Verfügbare ermöglicht einen hinreichenden Ueberblick über die weltliterarischen Leistungen der Alten; zu ihnen gehört Homer, der noch in die Gentilordnung hineinreichende Epiker schlechthin, ebenso wie Herodot, der Vater der Geschichtsschreibung, die römischen Elegiker ebenso wie der Romanautor Apulejus, Philosophie und Medizin nicht anders als die Zeugnisse des Rechtsdenkens und des aufkommenden Christentums. Den Pergamon-Altar, ein bedeutendes Denkmal hellenistischer Kunst, den sowjetische Freundschaftstat für die Berliner Museen bewahrte, kennt buchstäblich jedes Kind; aber auch die Kunstschatze aus anderen Perioden des Altertums, die in Berlin und anderswo in respektablen Sammlungen, wie zum Beispiel im jüngst neueröffneten Dresdener Albertinum, verwahrt werden, finden ihr Publikum. Dass die sozialistische Schule der DDR trotz mancher objektiver und subjektiver Schwierigkeiten das pädagogische Erbe des altsprachlichen Unterrichts zu wahren und für die Erziehung sozialistischer Staatsbürger zu nutzen weiss, kann ebenfalls nicht unerwähnt bleiben.

Derartige Tendenzen, die antike Überlieferung für die Gegenwart neu zu gewinnen, beschränken sich übrigens nicht auf die DDR. Die höchst erfolgreiche Aktivität ihrer archäologischen Missionen in Syrien, auf Zypern und in der Arabischen Republik Ägypten wird von der Teilnahme breiter Bevölkerungsschichten der Volksrepublik Polen getragen. Dasselbe gilt für die Ausgrabungstätigkeit in Bulgarien, Rumänien, Albanien, Jugoslawien, Ungarn, der CSSR und nicht zuletzt der Sowjetunion, für Länder sämtlich, deren Territorien ganz oder zu wesentlichen Teilen über lange Zeiträume hinweg, sei es in Handelsbeziehungen, sei es im kulturellen Austausch, zu den griechischen Stadtstaaten standen oder aber dem römischen Weltreich zugehörten. Juri Gagarin, der erste Mensch, der in den Weltraum vordrang, und die, welche ihm seither folgten, werden mit einem griechischen Wort als Kosmonauten bezeichnet; die junge Wissenschaft von den dynamischen, selbstregulierenden Systemen heisst auf gut griechisch Steuermanns-

kunst = Kybernetik; der sowjetische Luftgigant AN 22, um ein letztes Beispiel anzuführen, ist nach Antäus benannt, einem Riesen des antiken Mythos, dem jede Berührung mit der Mutter Erde neue Kraft verliehen haben soll.

Wie kommt es, so sind wir nach diesem Exempel veranlasst zu fragen, dass jenes griechisch-römische Altertum bis auf den heutigen Tag eine so sichtbare Wirkung zu entfalten vermag, obgleich doch, gemessen am gegenwärtigen Stand, seine Produktivkräfte völlig unentwickelt waren, seine primitive Gesellschaftsordnung nicht nur die Ausbeutung, sondern sogar die Versklavung des Menschen durch den Menschen zuließ und schliesslich seine wissenschaftliche Detailkenntnis sowie sein technischer Erfahrungsschatz auf recht niedriger Stufe standen? Man könnte, um Antwort zu geben, auf die unbestreitbare Tatsache hinweisen, dass nicht nur, wie gezeigt wurde, unsere politische und wissenschaftliche Terminologie in beträchtlichem Ausmasse auf die Antike zurückführt, sondern auch zahlreiche Begriffe unseres Alltagslebens wie Wall, Ziegel, Fenster, Rose, Birne, Pflaume lateinische Lehnwörter sind. Die Antwort bliebe jedoch an der Oberfläche, wollte sie nicht zugleich weiterfragend zu der Veranlassung solcher Sachverhalte vordringen. Im zweiten Falle — bezüglich der Lehnwörter — ergibt sich unschwer eine Begründung: Mit den Sachen haben unsere germanischen Vorfahren von den Römern auch die Wörter übernommen. Komplizierter stellt sich dagegen der andere Fall — die wissenschaftliche Terminologie — dar.

Wirtschafts- und Staatsordnungen hat es auch vor den Griechen gegeben, und nach unseren heutigen Kenntnissen und Vorstellungen gehört zur Geschichte des Altertums sehr viel mehr als nur die griechische und die römische Geschichte. Aber im Unterschied zu anderen Völkern ihrer Epoche haben die Griechen Ökonomie und Politik nicht nur betrieben, sondern auch darüber reflektiert; die von ihnen geprägten Begriffe nebst den Ergebnissen ihres Nachdenkens haben die Römer aufgenommen, um die eigenen Erfahrungen hereichert und als Ausgangspunkt für die moderne Wissenschaft der Neuzeit übermittelt. Der alte Orient hatte, zumeist veranlasst durch praktische Erfordernisse, in der Astronomie, der Geometrie und manchen naturwissenschaftlichen Disziplinen eine Fülle von Einzelkenntnissen zusammengetragen; die Griechen aber taten den nächsten Schritt, indem sie die Philosophie entwickelten, um jene Einzelkenntnisse zu ordnen, zu bewerten, zu verallgemeinern und in ein System zu bringen. Auf diese Weise gelangten sie zu einer rationalen Erklärungen der Naturvorgänge, die man vordem nur unter mystisch-religiösen Vorzeichen zu begreifen vermocht hatte. Doch nicht genug damit: Auf dem Gebiete der bildenden Kunst, der Literatur und des Theaters schuf das klassische Altertum die Formen und prägte zu einem gewichtigen Teil die Inhalte, auf denen die spä-

tere Entwicklung dieser Kernbereiche des kulturellen Lebens aufbaute. Den Römern endlich werden Denkformen und Ausdrucksweisen des Rechtes verdankt, die in beträchtlichem Umfang noch heute ihre Gültigkeit besitzen. Ein Einwand liegt dennoch nahe: Das Vorgetragene mag seine Richtigkeit haben und helfen, den Gelehrten die Vergangenheit zu erklären; doch was soll uns, die wir, den Blick auf die Zukunft gerichtet, mit aller Kraft ein neues, besseres Leben aufbauen, die Antike in unserem politischen Kampfe nützlich sein? Die Frage, scheint mir, muss man aus mehreren Gründen bejahen. Die Antike hat gegenüber den modernen Verhältnissen den ungeheuren Vorzug der Uebersichtlichkeit und Überschaubarkeit; sie kann deshalb in vielfältiger Beziehung als Modell dienen, um höchst aktuelle Anliegen zu verdeutlichen. Der Stadtstaat Athen im 5. Jahrhundert zeigt in der Sklavendalderdemokratie ein unter bestimmten Entwicklungsbedingungen in einem bestimmten Zeitraum funktionsfähiges Gesellschaftssystem, das in allen seinen Bezügen fassbar wird — beispielsweise auch in dem von Gesellschaft

und Kultur: Die Teilnahme an den dramatischen Aufführungen galt damals als gesellschaftliche Pflicht, deren Erfüllung den Minderbemittelten durch ein staatliches Theatergeld ermöglicht wurde die grossen Leistungen der griechischen Kunst in ihrer Blütezeit erwachsen aus staatlichem Auftrag, nicht aus künstlerischer Eingebung (um nur zwei von zahlreichen möglichen Beispielen anzuführen). In ihrem Denken, ihrer Literatur und Kunst entwickelte die Antike ein Menschenbild, das in seinen tief humanistischen Zügen auf unser sozialistisches Menschenbild hinweist; körperlich, geistig und moralisch in voller Harmonie entfaltete Persönlichkeiten, denen der prometheische Drang nach weltverändernder Erkenntnis ebenso innewohnt wie die bewusste Bereitschaft zum Dienst an der staatlichen Gemeinschaft, entsprechen diesem Ideal. ihrer Literatur und Kunst entwickelte die Antike ein Menschenbild, das Altertum daran, das von ihm postulierte Menschenbild zu verwirklichen; in der sozialistischen Gesellschaft, die jene Schranken zu überwinden befähigt ist, wird es im besten Sinne aufgehoben.

Die deutsche Altertumswissenschaft besitzt auf ihrem Arbeitsfelde eine international anerkannte Tradition, und die Fachvertreter der DDR sind nicht ohne Erfolg bemüht gewesen, das auf sie überkommene verpflichtende Erbe aufzunehmen und weiterzuentwickeln. Trotzdem bleibt angesichts der sich anbahnenden Neubelebung der Antike noch sehr viel zu tun, und zwar in doppelter Hinsicht. Dank ihres reichen Quellenmaterials besitzt auch heute noch die griechisch-römische Geschichte eine gewichtige Funktion im Rahmen der althistorischen Forschung — einer althistorischen Forschung, die den Europazentrismus überwunden hat und darauf bedacht ist, durch vergleichende Studien komplizierte Gesetzmässigkeiten der vorfeudalen Entwicklungsperioden in Welt-



massstab zu erfassen. Das zweite Anliegen aber besteht darin, im Zusammenwirken mit Philosophen, Kulturwissenschaftlern und Pädagogen den Ort zu bestimmen, der dem humanistischen Erbe des klassischen Altertums im System der sozialistischen Kultur zukommt, sowie durch eigene Leistung dazu beizutragen, dass jener Platz in optimaler Weise ausgefüllt wird. Diese Aufgabe zu meistern, heisst zugleich in der weltweiten Klassenauseinanderstzung an einer keineswegs unwichtigen Position Partei zu ergreifen; denn das antike Erbe wird nicht nur von den Verfechtern des reaktionären Geschichtsmythus vom christlichen Abendland, sondern gleichermassen durch gewisse spätbürgerliche, sich gelegentlich recht progressistisch gebärdende Strömungen in Anspruch genommen, die beide, gewollt oder ungewollt, seine humanistischen Inhalte in ihr Gegenteil verkehren. Die Arbeiterbewegung ist, wie Friedrich Engels sie gelehrt hat, zur Erbin der deutschen klassischen Philosophie geworden; sie allein vermag die Voraussetzungen dafür zu legen, dass die humanistischen Gedanken und Ideal des griechisch-römischen Altertums aufs neue zur vorwärtsweisenden gesellschaftlichen Kraft worden.

**J. Irmscher.**

## **Le SAUVETAGE DES VESTIGES DE LA ZONE DE SUBMERSION DU BARRAGE DE L'EUPHRATE**

**PAR LE Dr. AFIFI BAHNASSI**

Directeur Général des Antiquités et des Musées  
en République Arabe Syrienne

En 1968 fut posée la première pierre de la construction du barrage de l'Euphrate, le plus grand édifice hydraulique de Syrie. L'emplacement qui fut choisi à cet effet est le site de Tabka, entre Rakka et Meskené, à 147 kilomètres à l'est d'Alep.

Il est prévu que ce barrage formera un lac de 80 kms. de longueur et de 8 kms. de largeur moyenne. L'altitude au-dessus du niveau de la mer en est de 300 mètres. Ce lac submergera une surface de plus de 650 kilomètres carrés; cette zone forme une partie importante du bassin de l'Euphrate, lequel contient dans ses profondeurs des vestiges de civilisations successives s'étendant de l'âge mésolithique, au neuvième millénaire avant J.C., à l'âge néolithique, puis aux périodes mésopotamienne, syrienne ancienne, classique, byzantine et islamique jusqu'à la période ottomane.

La Direction générale des Antiquités et des Musées avait pour tâche de déployer ses efforts pour découvrir ces vestiges cachés dans les replis de ce bassin menacé d'immersion complète, et de sauver les vestiges se trouvant au-dessus du sol. Aussi a-t-elle envoyé depuis 1963 l'un de ses experts, M. Abdelkader Rihawi pour effectuer un relevé archéologique de la région. Il fut le premier qui détermina les buttes archéologiques, en fixa les emplacements et en établit l'importance. Il établit aussi les bases de la restauration des vestiges archéologiques de la zone de Ja'abar et de celle de Abou Houreira et Meskené. Les emplacements archéologiques délimités dans le rapport atteignirent trente-quatre sites.

La République Arabe Syrienne a lancé un appel à l'échelle mondiale par l'entremise de l'UNESCO pour inviter les pays du monde à apporter leur coopération technique aux opérations de restauration et à envoyer les missions scientifiques pour effectuer des fouilles dans les sites et buttes historiques délimités dans la zone de submersion. Cet appel a été accompagné d'une notice explicative illustrée.

Le gouvernement promulgua ensuite une législation permettant aux autorités archéologiques de donner aux missions étrangères effec-



tuant des travaux sur les sites historiques qui seront immergés par les eaux du barrage de l'Euphrate la moitié des découvertes transportables.

Certains milieux scientifiques du monde répondu à notre appel et ont en fait procédé à des fouilles et en obtenu des résultats brillants.

Quant à l'assistance spéciale aux opérations de restauration et de sauvetage des vestiges menacés de submersion, l'Unesco seule a répondu à l'appel, et a effectué les travaux suivants :

- 1— En 1967, une mission de l'Institut national français de Géographie a été envoyée pour effectuer un relevé photogrammétrique des vestiges menacés. Cette mission était présidée par l'ingénieur Carbonel.
- 2— En 1968, l'expert Maurice Berry fut envoyé pour effectuer les études techniques pour le transfert des minarets de Abou-Hureira et de Meskené de la zone de submersion.
- 3— Un Budget de 23 mille dollars a été affecté pour l'achat de machines.
- 4— M. René Maheu Directeur Général de l'Unesco, a visité la zone de submersion vers la fin de 1972 et a pris connaissance des travaux de sauvetage et des fouilles.

L'assistance financière de l'Unesco, malgré sa modestie, a été d'un grand effet en attirant l'attention sur l'importance de cette région du monde tant du côté archéologique que du côté humain. La Syrie avait à supporter l'entière responsabilité du sauvetage de ces vestiges, aussi, la Direction générale des Antiquités et des Musées a-t-elle mis au point un plan exceptionnel pour lequel les budgets nécessaires furent affectés et pour lequel elle a mobilisé tous ses effectifs et experts. Ce plan peut être condensé comme suit :

- 1— Assurer les facilités nécessaires aux missions étrangères de recherches pour leurs travaux.
- 2— Former des missions syriennes de recherches pour effectuer des sondages et des excavations soit indépendamment, soit en collaboration avec les missions étrangères.
- 3— Former des missions de restauration pour sauver les vestiges menacés de submersion.
- 4— Affecter le matériel de la Direction pour exécuter le plan et s'assurer éventuellement l'assistance du matériel du projet du barrage.

- 5— Adopter exclusivement les études des experts de la Direction Générale, qui se sont avérées fonctionnelles et économiques.

- 6— Affecter les budgets nécessaires pour faire face à l'éventualité de l'absence d'aide arabe ou étrangère.

L'exécution du plan a commencé officiellement en 1972, et le plan devait être complété en fin de 1973 vu l'approche de la terminaison des travaux du barrage à cette date, à partir de laquelle le lac commencera à se former et à couvrir peu à peu la région des vestiges jusqu'à un niveau de près de 300 mètres au-dessus du niveau de la mer en peu de mois.

Ceci indique toutes les fouilles doivent s'arrêter complètement le 15/10/1973, ainsi que les travaux de restauration. Quant aux fouilles et travaux de restauration et de reconstruction dans les zones non submergées, ils pourront être poursuivis pour une longue période.

Durant la période des travaux de sauvetage et de prospection des vestiges de la région du bassin de l'Euphrate de magnifiques résultats ont été atteints et les découvertes de fouilles et travaux de restauration ont fait l'objet d'une exposition monstre dans le musée d'Alep le 13 novembre 1974. L'Unesco a publié un catalogue qui a contenu les résultats des fouilles effectuées par les missions nationales et étrangères. Le Directeur Général de l'Unesco M. René Maheu a écrit lui-même la préface de ce catalogue qui est le troisième et le dernier sur les opérations de sauvetage des vestiges de l'Euphrate. Le premier de ces catalogues fut publié en 1970 en langue française et contient des informations sur l'importance archéologique de la région, et le second fut publié à l'occasion de la cérémonie de la déviation du cours du fleuve le 5 juillet 1973 et contient les réalisations et résultats des fouilles entreprise jusqu'à ce jour.

Il faut reconnaître que les résultats des fouilles ont largement dépassé nos prévisions. Le délai très court dont on disposait pour les fouilles n'ont pas empêché d'effectuer un relevé complet et précis et d'obtenir les résultats recherchés. Les chercheurs ont pu s'assurer l'existence de l'emplacement de la ville de Eimar, port du royaume alépin de Yamhas au second millénaire avant J. C., et ont pu découvrir des vestiges de l'âge néolithique indiquant que l'homme de l'Euphrate a pu, dès le neuvième siècle avant l'ère chrétienne, construire des maisons d'habitation et les décorer avec les couleurs rouge et noire, et faire des sculptures en terre de la déesse de la fertilité.

Cette découverte confirme l'existence de la plus ancienne civilisation connue jusqu'à cette date, à l'exception des vestiges de l'homme paléolithique découverts dans diverses régions de France et d'Espagne.

Cette découverte importante a été effectuée à Tell el Mureibet par la mission française présidée par M. Jean Cauvin, au cours des saisons de 1972-1973. La mission américaine avait auparavant effectué des sondages en 1965 dans la même région, sondage qui avaient souligné l'importance de ce site, et d'autres sondages dans le site de Tell Selenkahieh. La mission était présidée par M. Moritz Van Loon.

Une mission suisse dirigée par M. Rolf Stucky a effectué des fouilles à Tell el Hajj et y avait découvert des vestiges remontant à la période classique, et une mission hollandaise dirigée par M. Hendricks Franken avait aussi effectué des fouilles à Tell el Hariri et y avait découvert des tombeaux importants de l'âge du bronze, ainsi que des sondages dans le site de Ta'as pour l'étude de la poterie des diverses périodes. Une mission belge dirigée par M. Jean-Charles Balty a effectué des sondages dans le site de Halaweh, y découvrit une rue byzantine pavée.

Dans le site de Dibsi Faraj, la mission américaine dirigée par M. Richard Harper découvrit une citadelle fortifiée de l'ère romaine et une église byzantine dallée de mosaïque.

Une autre mission américaine effectua en coopération avec une mission syrienne des fouilles dans le site de Tell Fray. Cette mission était dirigée par Mrs. Thérèse Carter. De même, une mission italo-syrienne a effectué des fouilles dans le même site.

Une mission française dirigée par MM. Lucien Golvin et André Raymond effectua des fouilles à Meskené, y découvrant des vestiges islamiques et byzantines; cette mission fut la première à découvrir un site important qui remontait au deuxième mille avant J. C. Une autre mission française dirigée par M. Jean Claude Margueron y effectua des fouilles et y découvrit des dizaines de tablettes cunéiformes lesquelles, une fois déchiffrées indiquèrent que ce site déterminait l'emplacement de la ville de Eimar, ville qui fut fréquemment citée dans les textes de Hammourabi et les textes de Zimrilim roi de Mari. La mission découvrit aussi des cachets du roi de Karkemish, et du roi de Eimar ainsi que de magnifiques statuettes de bronze.

Les missions allemandes dirigées par M. Ernst Heinrich, puis par Mme Eva Strommenger ont effectué des fouilles au grand Tell de Habuba, et y découvrirent des niveaux de l'âge du bronze, ainsi que des cachets et des trouvailles remontant au troisième millénaire avant J.C.

Cette même mission effectua des fouilles au petit Tell Habouba au sud, dans lequel des installations ont été découvertes ainsi que des objets datant aussi du troisième millénaire.

Une autre mission allemande effectua des fouilles à Tell Mumbat sous la direction de M. Heinrich puis de M. Winfried Orthmann et découvrit une ville fortifiée remontant au premier millénaire et une autre cité encore plus ancienne ainsi que des objets de valeur unique.

Quant aux missions nationales, elles ont effectué les travaux suivants :

**I — Missions de fouilles :** auxquelles ont participé MM. Adnan Bounni, directeur des fouilles, Nassib Saliby, Abdulrazzak Zakzouk et Kassem Toueir. Ces Missions ont effectué les travaux suivants, soit seules soit en coopération :

1 — Vestiges de Tell el 'Abd, dans lequel ont découvert des installations et objets de l'époque romaine et de l'époque hellénistique ainsi que des périodes antérieures jusqu'à l'âge du bronze.

2 — Site de 'Annab el Safineh : découverte d'une nécropole romaine unique contenant dix statues. Il est apparu que cette nécropole avait été réutilisée à l'époque byzantine comme tombeau dans lequel ont été découverts beaucoup de meubles funéraires.

3 — Fouilles à Qalaat Ja'abar dans les ruines de la mosquée avoisinant le minaret.

4 — Découverte à Tell el Cheikh Hassan d'une ville byzantine inconnue, puis d'une ville islamique.

5 — Fouilles à Tell Fray en coopération avec la mission américaine et une mission italienne dirigée par M. P. Mathiae.

**II — Missions de restauration :** Ont participé à ces missions les ingénieurs et architectes MM. Rabii Dahmane, Youssef Jabali Abdulghani Hafez et Badr Dajani. Ces missions ont effectué les travaux suivants :

1 — Restauration de la citadelle de Ja'abar : C'est une grande citadelle islamique qui fut connue dans l'histoire sous le nom de citadelle de Dossar. Elle fut construite sous le régime seljoukide (XI<sup>e</sup> siècle). L'histoire raconte qu'elle appartenait à une personne nommée Ja'abar, dont elle porta le nom. Elle lui fut enlevée par Malek Shah le Seljoukide, puis occupée par Nouredine Zenki en 1145, puis fut restaurée par le vice-sultan à Damas, l'émir mameluk Tenkis en 1340.

La citadelle de Ja'abar est considérée comme la plus ancienne des citadelles islamiques, et est construite en briques cuites. Elle mesure 370 mètres de long et 170 m. de largier, et comprend trente-cinq tours situées aux jointures des murs d'enceinte, séparés par un fossé. La citadelle est dominée par un minaret de 27 mètres de haut. Les limites de cette citadelle se trouvent à une altitude de 307 mètres. Les tours et le mur d'enceinte ont été restaurés dans le côté est et dans une partie du côté ouest, « ainsi que le donjon Alia » dans la partie sud-ouest qui a été restaurée pour devenir un musée des vestiges islamiques de la citadelle de Ja'abar. Près du donjon Alia les citernes d'eau sont destinées à devenir un musée des vestiges classiques. Le cimetière de 'Annab el Safineh a aussi été reconstruit. Dans la citadelle a été crée un



atelier de fabrication de briques cuites pour les travaux de restauration et de réparation. L'entreprise du barrage de l'Euphrate effectuera les travaux de protection des abords de la citadelle, travaux qui coûteront quatre millions de livres syriennes. Le travail a commencé à Ja'abar vers le milieu de 1971 et se poursuivra dans le futur pendant les dizaines d'années après que la citadelle sera devenue une île.

2 — Transfert du minaret de Abou Houreira : Ce minaret date des 4<sup>e</sup> et 6<sup>e</sup> siècle de l'Hégire, il est construit en briques et il est en bonne condition. Il avait été restauré en 1939 et il mesure dix-huit mètres de hauteur et trois mètres et demi de diamètre.

Le rapport des experts de l'Unesco comportait la suggestion du transport du minaret vers un lieu éloigné en un seul bloc sur des rails. Cette suggestion fut impossible à réaliser et il n'y avait d'autre issue que d'exécuter celle du département de restauration dans la Direction Générale des Antiquités et des Musées de Syrie, en découpant le minaret en tranches ne dépassant pas un poids de huit tonnes chacune, et ces tranches furent transportées vers le nouveau site où elles ont été reconstruites.

Le nouveau site choisi fut dans les environs de la ville al-Saoura, dans un jardin public, où le minaret fut transporté et reconstruit par des experts et ouvriers locaux avec l'aide des équipements de la direction de l'Archéologie. Le travail a duré neuf mois.

3 — Transfert du minaret de Meskené : Ce minaret s'élève à une hauteur de vingt-six mètres et à un diamètre de quatre et demi. Il est en bon état et se caractérise par un noyau dur et des bandes décoratives dont une très belle calligraphie étudiée et étendue. Le transport s'est effectué à un lieu proche de la route principale conduisant à Tabka, par la même méthode que précédemment, mais au moyen d'échafaudages élevés vu l'impossibilité d'utiliser des grues ordinaires et le manque de grues élevées. La construction s'est terminée pendant la deuxième moitié de 1974.

Nous voyons donc que les travaux de fouilles étaient suffisants et complets. Ils ont eu de belles réussites dans plus d'un site archéologique et ceci revient à la participation efficace des missions archéologiques mondiales. Quant aux opérations de restauration, elles se sont effectuées avec des moyens très simples mais coûteux en efforts et en frais. L'assistance internationale était de ce côté limitée et trahie.

Les vestiges qui ont été sauvés et restaurés n'étaient pas naturellement au niveau d'Abou-Simbel et de Philae en Egypte, mais ils étaient des vestiges uniques en leur genre et étaient menacés d'être submergés pour toujours si nous ne les avions sauvés

Nous ne manquerons pas ici de citer l'importance de la citadelle de Ja'abar, architecturalement et archéologiquement. Cette citadelle sera exposée à des contraintes mécaniques considérables qui seront causées par les eaux du lac qui se formera, ce qui aura son influence sur des parties importantes de la citadelle, malgré sa position au-dessus de niveau du lac.

Aussi, la Direction du projet de l'Euphrate a-t-elle mis au point une étude pour la protection de la future île de l'effet des eaux. Le coût de cette protection atteindra quatre millions de livres syriennes qui seront versés par le gouvernement syrien lui-même, malgré ses responsabilités énormes et les grandes charges qu'il supporte dans les autres domaines.

Cette citadelle, comme tous les vestiges se trouvant sur le sol syrien, sont la propriété de l'humanité entière, et la responsabilité de leur sauvegarde incombe à tous peuples en général et aux Arabes en particulier.

Affi Bahnassi.



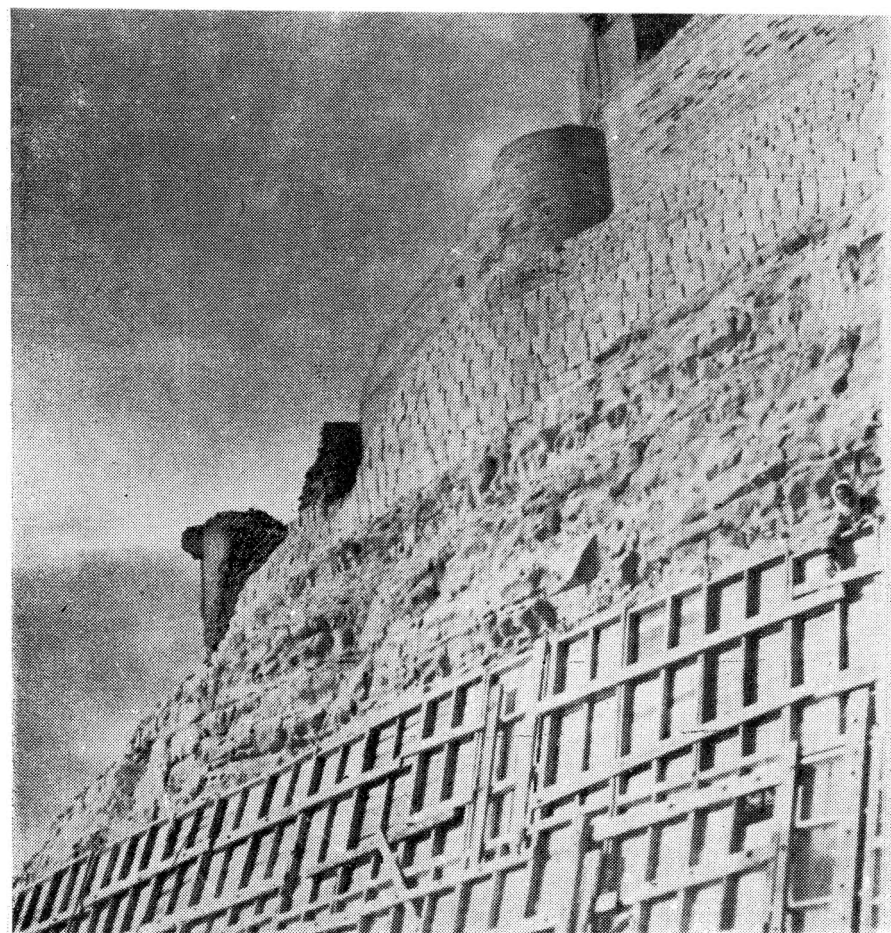
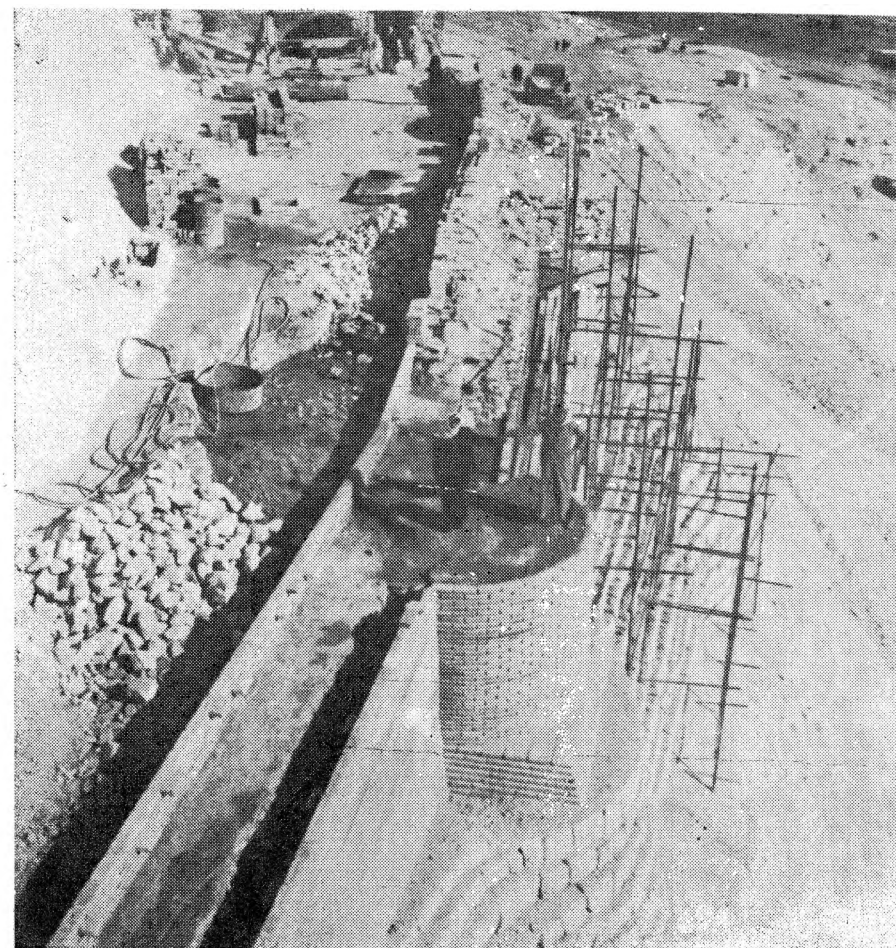
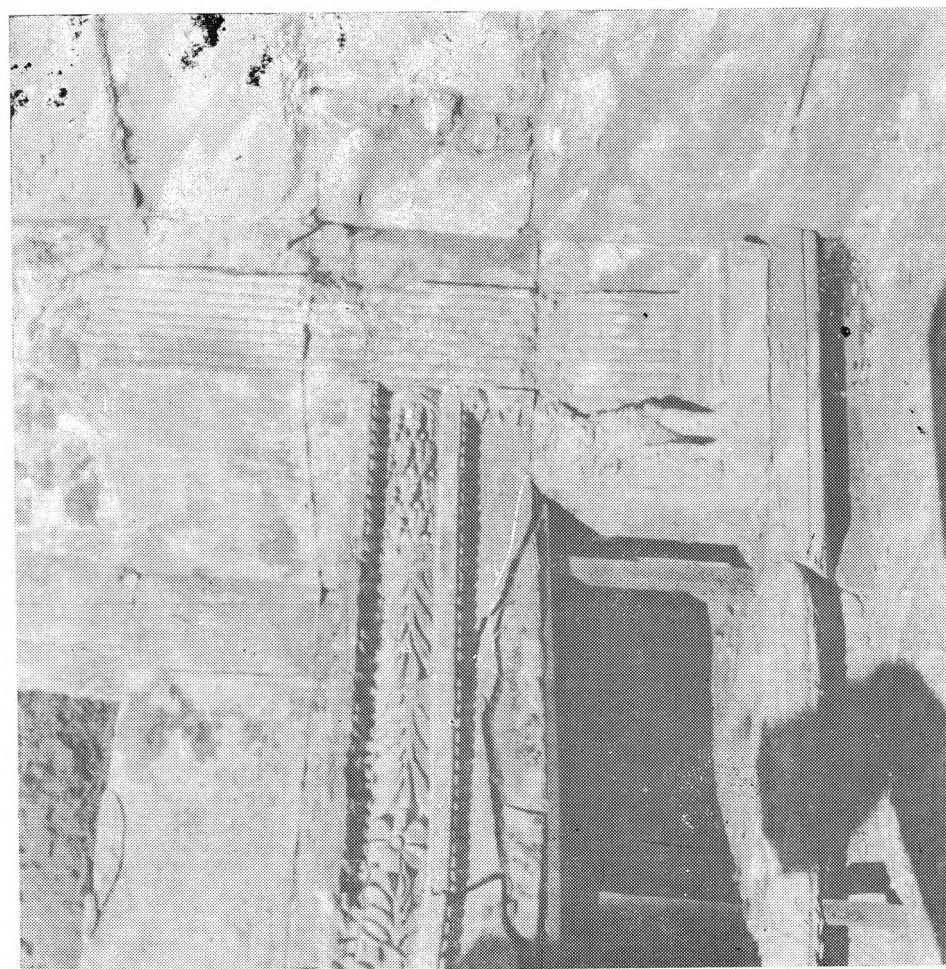


Fig. 1. Travaux de restauration et de consolidation a Qal'at Jaa'bar.

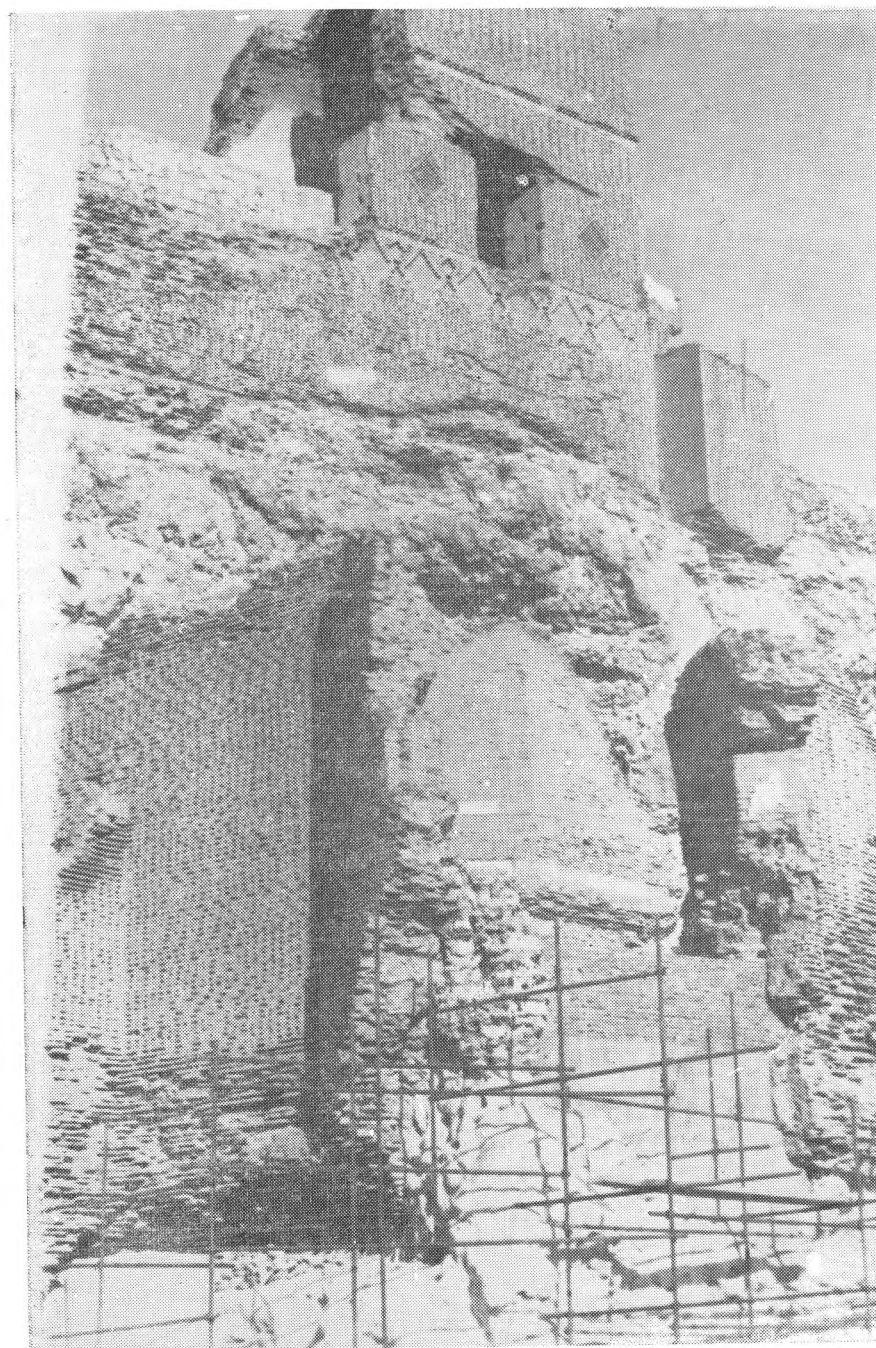


La consolidation des murs de la citadelle

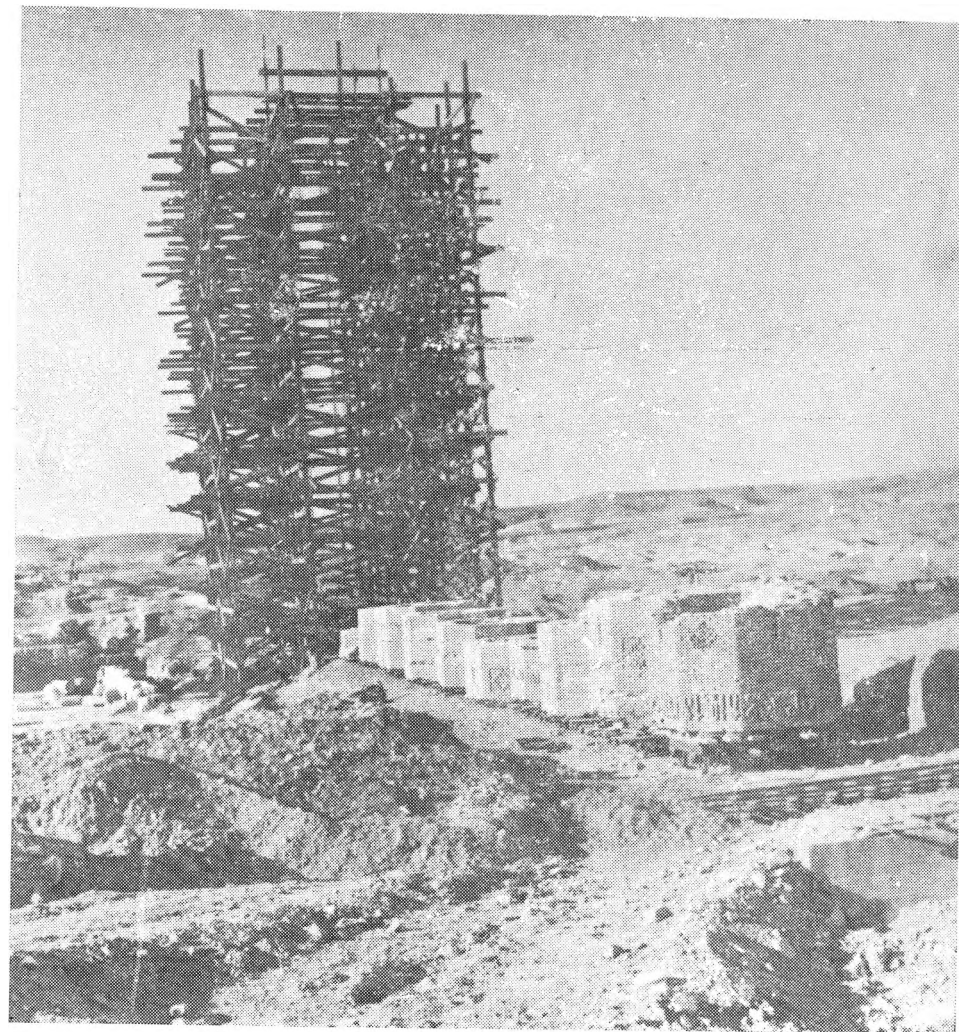


Hypojée de 'Annab el Safineh

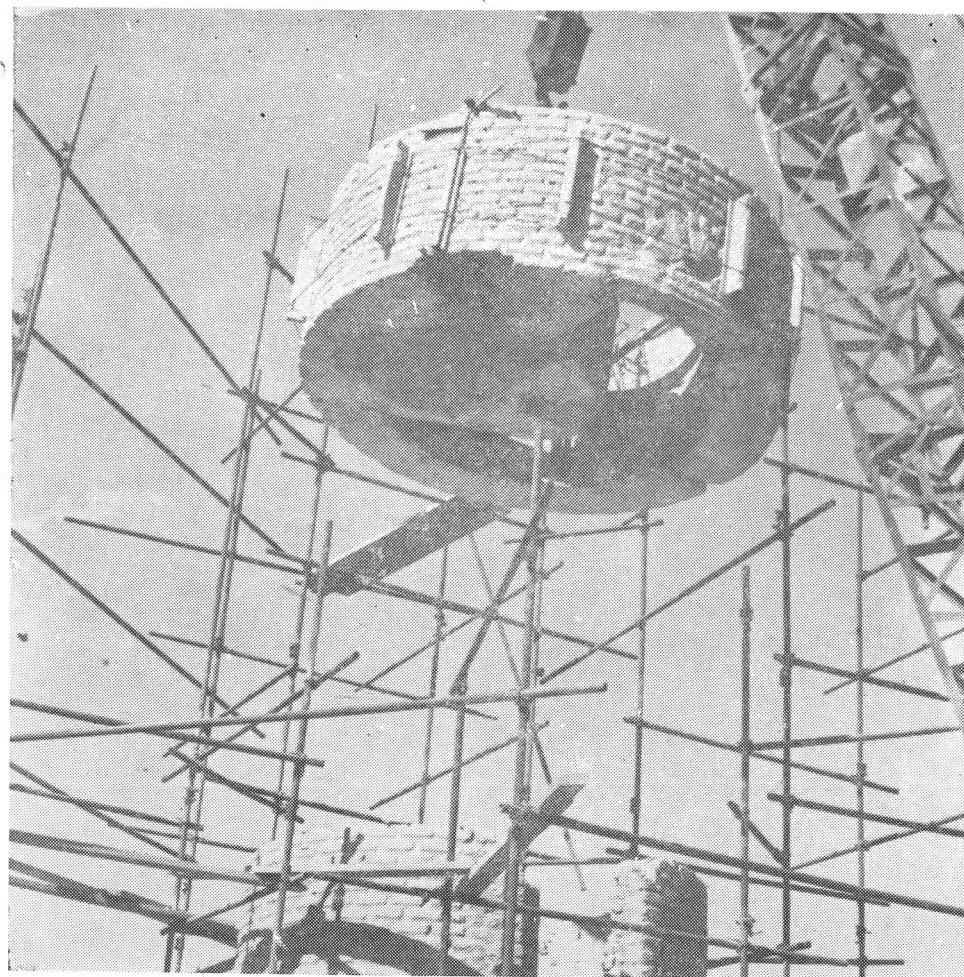




Restauration de la citadelle



Decoupage du Minaret (Mesekené).



Decoupage du Minaret de «Abou Houreira»

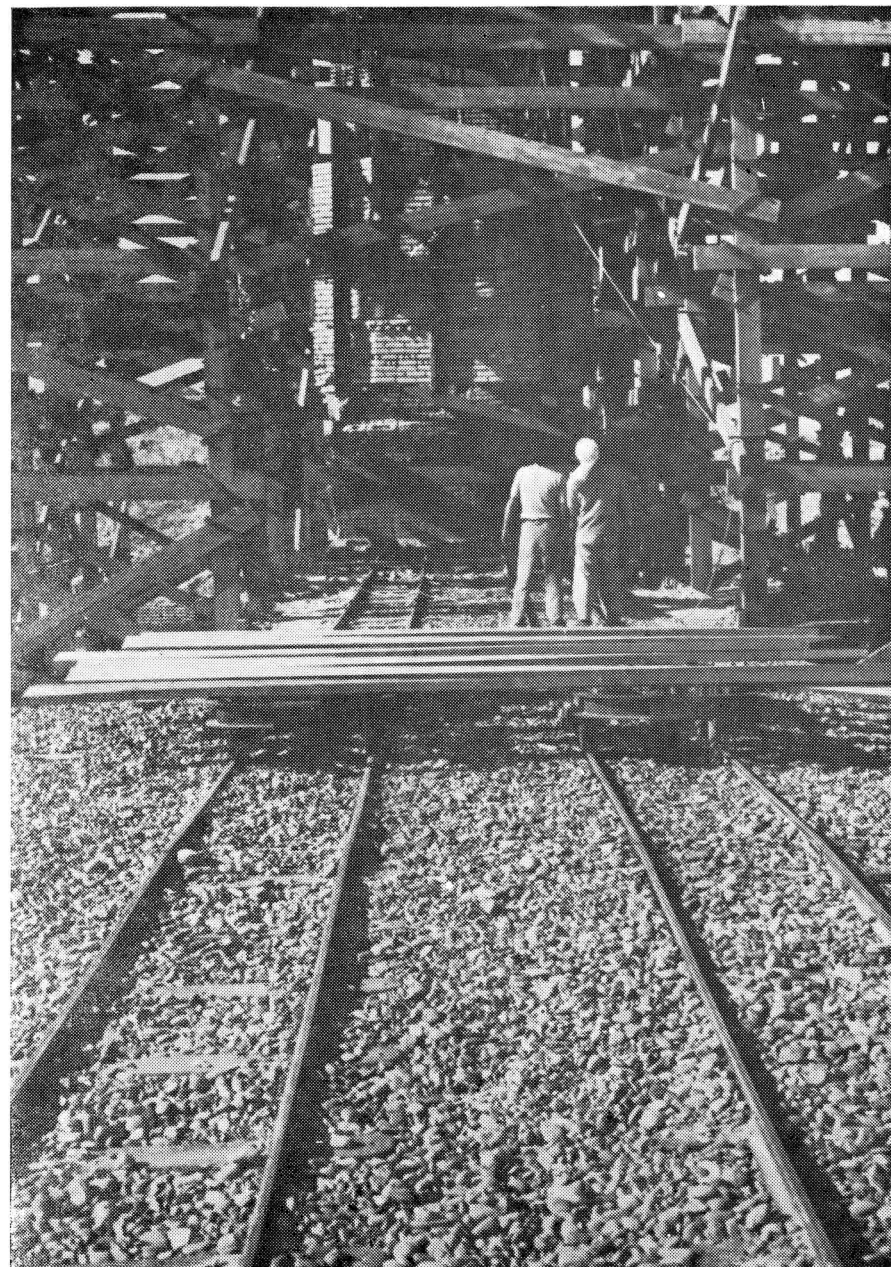




La citadelle «Qalaat Ja'abar»



Féminine en argile de Hureybet (Syrie) 8ème millénaire av. J.C.



La transposition des coups de minaret de Meskené





Figurine féminine en calcite du 8ème millénaire av. J.C. provenant  
de Hureibeat (Syrie).

## EGYPTO-ARABIAN RELATIONS IN THE ANCIENT WORLD :

### SOURCES AND STUDIES (1)

by

**Dr. MUH. ABDUL-KADER MUHAMMED**

(A Paper presented at **First International Symposium on Studies in the History of Arabia. April 23, 1977. University of Riyad.**)

This study is an attempt to highlight the relations that existed in ancient times between Egypt and the Arab world, if we can find answers to the following questions.

Did the Semites come to Egypt? When and How ?

The routes they followed.

Their contribution to the Egyptian civilization.

The evidence of language.

Since Egyptian contribution to the Arab civilization is a wide subject it suffices here to concentrate on certain aspects in the fields of art and architecture which are manifest in those of Arabia.

The Ethnic Relationship.

The early settlers of the Nile Valley and their relations with western Asia. The advent of the Semites. Their presence in Egypt. The earliest representation of a bedouin. Their contribution to Egyptian civilization. The continuous infiltration of Semites into Egypt in historical times. Skulls. Monuments. Artifacts. Hieratic papyri.

The Ethnic relationship between the ancient Egyptians and the Arabs seems, at first glance, to be non-existent. But this relationship is, indeed, strong. First, the Egyptians and the Arabs belong to the Mediterranean race, who had spread throughout Arabia, western Asia (with the exception of Asia Minor) north Africa, and certain parts along the eastern coast of Africa. The Egyptians preserve the same physical features which bind them since prehistoric times with the population of western Asia (7,8 p. 29, 22, 23 p. 130 — 132, 35).

**Prehistory and Protodynastic :**

The most ancient **agrarian** cultures in the Nile Valley are Faiyum Marimda Beni Salàma, Ma<sup>c</sup>adi, then El-Badàri and Nagàda. These cultures are considered to be pre-Semitic Egyptian. Faiyum or Marimda is the oldest not only in Egypt but in the whole of Africa (32,43)

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(1) The Arabic Text was published in **The Periodical Of The Faculty Of Arts Mansoura University, May 1979.**

It is a good opportunity to publish this text in a memorial volume devoted to Ahmed Kamal pacha as one interested in such studies. D.A.

Agriculture and domestication of animals are known in both cultures. Faiyum is dated 4150 or 4450 B.C. according to Carbon 14.(32). But one of the prerequisites for the initiation or establishment of agriculture is the domestication of animals. In Africa only wild cattle is known at that time, goats and sheep which make such agriculture possible were not known south of the Great Sahara.

On account of this, some authorities suppose that the domestication of animals was introduced from South West Asia, together with agriculture, though agriculture could possibly be local «local agriculture is known in Egypt before the introduction of Asiatic cereals. For in the upper silt levels between 12000 and 10000 B.C. there appeared large areas containing grinding stones, and sickle-blades with a silica-gloss. This may reflect the cutting and grinding of some local plant foods, though not the cereals wheat or barley which, being winter rain crops, were not native to Egypt. J.D. Clark has suggested that the adoption of these Asiatic crops were retarded by the fact that the Egyptians already had local food plants.»(a)

Western Asiatic cereals such as wheat and barley and millet were not known in Egypt and their wild ancestors were in Asia (32 p. 212). These cultures were, at least, in contact with Palestine. Hence culture moved down to Badari in the province of Asyut, then to Khar-tum and Shaheinab in Sudan which dates 3300 B.C. according to carbon 14. From Egypt, civilization went westwards through North Africa after another thousand years.

The people of these cultures knew flax, weaving and the art of building. (15) But more progress took place in Badari where an industry of bone and ivory and use of copper, found in the eastern desert and Sinai, were known. Badari had trade relations with western Asia, and probably with the gulf area; for gold was brought from Nubia, copper and Manganese from Sinai, tar from the Red Sea, obsidian, lapis lazuli, silver, and emery from Western Asia and Greek archipelago (15 p. 75) shells, copper and semi-precious stones from the province of the Eastern Desert extending to the Red sea. In the district of Wadi El-Hammamat there were discovered various archaeological remains which go back to the cultures of Badari and Nagada I, and which confirm the existence of these contacts between the Nile Valley and the Red-sea through that route of Wadi El-Hammamat. In Deir Tasa, there was found a beaker with flaring brims resembling a lily-flower, the drawings of which cover its outer surface, a proof of the existence of ancient contact between Egypt and Iberia.

a. J. Mellaart has stated in his book. *The Neolithic of the Near-East* (London 1975) P. 64. See also : J.D. Clark : *A Re-examination of the Evidence for Agricultural Origins in the Nile Valley*. P.P.S. 37 (1971).

Among the tools made during this period are stone-axes and arrow heads for fighting, palettes of stone for grinding malachite eye-paint. Later these were employed as memorial artifacts on which the important deeds of kings are recorded. Nagada I, with an advanced locality at Khor Behan in Nubia (26) has also many connexions with Western Asia, the ware discovered therein bear geometrical decorations similar to the patterns on the ware of western Asian cultures.

However it is not yet possible to determine how such connections existed between such distant countries since Naqada culture had deep roots in the earlier cultures of Egypt. Moreover this apparent similarity is in fact not convincing.

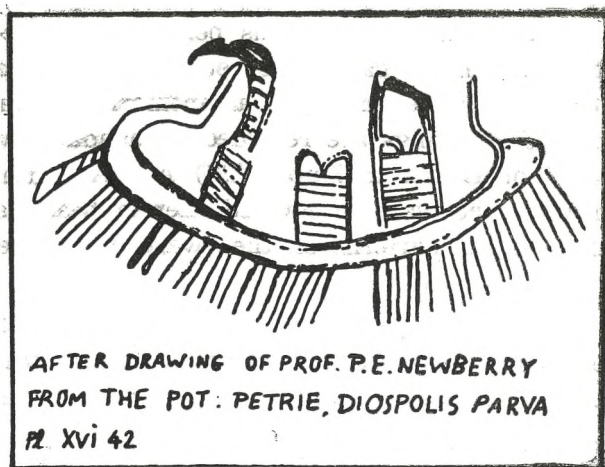
According to the the interpretation of Baumgartel, this influence took place through the Arabian gulf where culture of coloured ware were found in Bandar Bushire and old Hermuz, and the southern coast of Arabian peninsula. Baumgartel, however, admits that this is a mere hypothesis (57pp. 17-18) No gold was found in Nagada I, but its old name was Nbt. According to the interpretation of Baumgartel it may mean gold. If this is true, then the wealth of Nagada I was dependant on gold which was paid for their imported goods of turquoise, lapislazuli, and other raw materials, since gold mines which were explored in historical times are not far from this site.

These early cultures : Fayum, Marimda, Badari, and Nagada I were, in the opinion of scholars, founded by Egyptians of non-semitic origin. This is not irregular for until then the Semitic element did not come on the stage of history any where in the Middle East not even in Southern Mesopotamia. For it was believed, until recently, that the Semitic activity (still certain scholars hold this view) (53), did not come into being until the Sargonide age in Akkad (2371-2230 B.C.), when Landsberger, supported by S. Kramer, (12) was able to demonstrate that the Sumerian language contains Semitic names, and these words are the words of civilization, such as, Farmer (engar), plough (apin), fishermen (shuhadak), date (sulumb) metalworker (tibira), smith (simug) carpenter (nangar), basketmaker (addub), weaver (ishbar), leatherworker (ashgab), merchant (damgar), mason (shidin), etc.

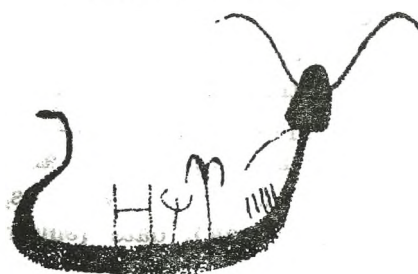
and that the people of this Semitic language which precedes the Sumerians are the Ubeidans (a) whose town is one of the oldest in Southern Mesopotamia, and that they are the real bearers of civilization to South Mesopotamia. Their civilization was inherited by Sum-

a. J. Mellaart : *The Neolithic Of The Near East*. (London 1975) p. 281. suggests that both Sumerian and Pre-Sumerian (eg. El-Ubaid) lead us to the Zagros cultures of the Aceramic and perhaps the Epipalaeolithic period, from which those later cultures are evidently descended.





35 WEIGALL TRAVELS  
PL. XIX 1 (W. 'ABBÂD)



36 WEIGALL TRAVELS PL. XXIX 4  
(WÂDI 'ABBÂD)



37 WEIGALL TRAVELS  
PL. XXX 5 (W. 'ABBÂD)

Fig. 1. A. Rock-drawings of boats.

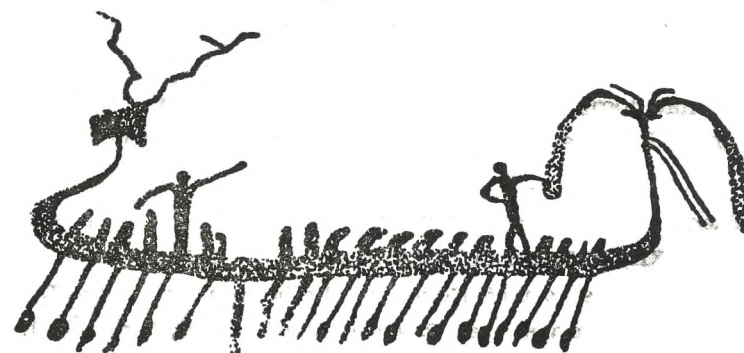
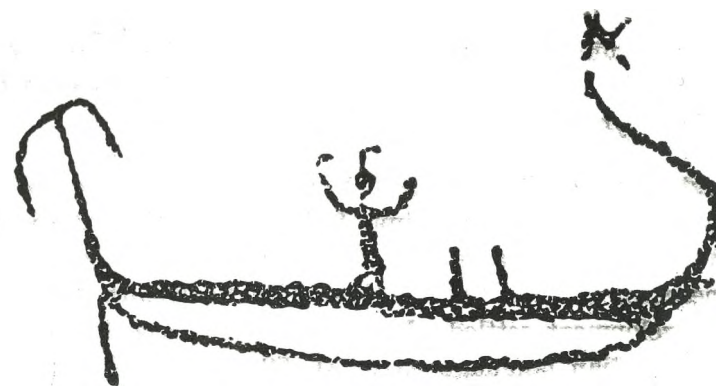


Fig. 1.B. Rock-drawings of boats.

erians. Those Semites, thence, spread out along the coasts of Arabia (30); and this was one of the routes which the Semites used in their drive towards Egypt.

The First group of Semites that was possible to prove its existence in Egypt was in Nagada II in Egypt. It is believed that at the beginning of this period there came unto the Nile Valley, a foreign people who were peaceful traders, then enticed with its wealth and its possibilities of development settled down. To them is due the Semitic element in the Egyptian language (57p. 21, 59p. 35-6.) This theory is supported by scenes carved on a knife-handle found in the eastern desert in Egypt now in the Louvre museum at Paris, and is well known under the name of the knife of Gebel El-Arak. On the ivory handle of this flint knife the scene illustrates the arrival of a new people. On one side of the ivory handle is shown a battle-scene in which sticks are used in the fight. In the scene below there are engraved boats distinguished with its high prow and stern, then the third register a different type of boat, smaller in size. On the obverse of the handle at top, a man is depicted standing between two lions, then below a scene of wild life. Though it is said that these boats are similar to boats found in Sumerian reliefs, it is almost certain that these boats which were distinct with its high prow and stern, were Egyptian boats widely used in the Nile Valley. For drawings of these boats are depicted in the valley of eastern desert and Kharga Oasis (a) (fig. I., pl. 25) They are also carved over the beheaded bodies on the palette of Narmer (Pl.20) which illustrates the victory of the South over the North. (b) This could indicate that this type of boat was originated in the Delta where marshes covered the lands most of the year.

It was again said that the human figures on this knife are similar to the figure on a Sumerian vase of alabaster found in Warka (Uruk) in Iraq. There are also similarities with a battle-scene painted on a wall of Komel-Ahmer-tomb (Hierakonopolis), and another on a fragment of a painted linen found on a cemetery at El-Gebelein. Other similarities are mentioned concerning walls of monumental architecture. Thence some scholars have put forward the suggestion that the Egyptian civilization was derived from Sumerian origins. But the origin of these people who came to Egypt is not certain. In Bahrein (Delmun) archaeological remains found there show affinities with those of Mesopotamia. But the culture of Delmun is characteristically Sea-faring

- a. H. Winckler : Rock-drawings of Southern Upper Egypt. (London 1938.); Vol. I. Pls. XXII, XXXIII-XLI; 1939. Vol. II, Pls. XIV,XV,
- b. It is discussed as the boat of Horus in : Recherches Sur la 1er Dynastie et Les Temps prépharaoniques, par Raymond Weill. (Le Cairo. 1961), Vol. I. 330 — 335.

trade. Then, are the boats of those traders which came to Egypt? Had Oman played a role in this trade, for it had trade connections far and wide with various countries especially India (12p.399; 101) Oman was as well, the source of copper used in Mesopotamia. (30). But though Oman was the source of copper which developed the Mesopotamian civilization this does not apply to Egypt; for, as it is mentioned above, the art of metalurgy was known in Egypt since the Badarian culture, because copper was abundant in Sinia as is evident from the inscriptions engraved by Egyptian Kings on rocks of Sinai where other raw materials were also brought into the country. The region of the eastern desert is no less opulent than Sinai in producing gold, copper, other kinds of stones, and raw materials, prerequisite for the development of civilization (15p. 66-7).

But one of the main sources of copper and other metals in ancient times was the Anatolian plateau and Caucasian region (41p. 128) where the followers of Osiris are to have come from, as is proposed by F. Petrie (46 p. 7). Other scholars, as well, believe that the region of the Caspian sea is the original home of the Semites (14,34,54 p. 16). (a) This may mean that both the Egyptians and the Semites were once living together on one site before they separated and settled down in their new homes. But we must not forget the supposition that the people of El-Ubaid had come from the north east, from Iran.(47,48).

Another site of contact between the Egyptian and the Semites was Palestine (4p. 73-79) and this is confirmed at least in the culture known as Ghassul-Beersheba. It is certain that there existed trade connexions between this culture and that of Naqada II of Egypt (4,58, p. 39). An example of that are fan-like scrapers made of flint of type found in the Ghassulean culture of Palestine. In addition, the weavy-handled pottery which is characteristic of Naqada II has affinities with that of Syria. Thence it is said that it was imported (59,p22). But this type was found in Maadi (b) 15. a proof that it is an Egyptian Delta industry which has its own independent origin. However, these similarities prove the existence of contacts between Egypt and these countries. The Ghassul-Beersheba culture had affinities also with the Uruk-culture in Mesopotamia. Palestine, an ancient original home of Semites as is evident in the names of towns, rivers, (4p. 178) was no doubt an imported centre of inter-cultural exchange between Egypt and neighbouring countries and Mesopotamia. Moreover, the ancient route Palestine-Sinai was the most important route along which the Semites and other peoples found their way to Egypt.

- a. Bedrich Hrozný, Histoire de L'Asie Antérieure De L'Inde et De la Crétée, p. 51 — p. 78 — 79) (Payot. 1947. Paris).
- b. see also Albright : The Archaeology of Palestine (London 1949) p. 70 (Pelican Books).



## The Egyptian Civilization is Semitic-Arabic

### but Not Sumerian.

From the preceding argument it is evident that the initiators of civilization in Mesopotamia are Semitic Arabs, and that the Sumerians inherited this civilization. In Egypt, as well, the civilization which originated is an Egypto-Arab and not Sumerian, as is claimed by the supporters of Sumerian civilization.

The system of crenellated walls, as is seen in the tomb of Neit-Hotep in Upper Egypt and which is said to have been borrowed from Mesopotamia, is actually inherited from a system which had existed in the Delta; for this queen was a princess of the Delta, and though the Delta has not yet revealed its archaeological remains, but according to Palermo stone the first kings of Egypt were those of the Delta (67,68). Consequently, the royal tombs of the First Dynasty discovered in the north at Saqqara, are distinguished with this type of architecture (5p. 124-127). This panelling was painted with bright colours to form decoration representing mats which were used to decorate the outer faces of the houses of the living, for the tomb is a representation of this house. The people of the Delta made for themselves shelters or houses of reeds, mats and wood. (pls. 20-21-22) A proof of this is a representation of an Egyptian house reproduced in mosaic on a wall of a temple at Praeneste, in Italy from the Roman times (33pl. 24), and the representations of god-shrines, since the dawn of history, on the archaeological remains of the Ancient Egyptians (5,13). This type of architecture did not disappear, as is believed, from Egypt. It is still preserved in the king's Serekh name (5p15), and is used also as decoration on the stone sarcophagi of the Old Kingdom; a good example of that is the stone sarcophagus of Mycerinus (13). Another living example is the enclosure wall of a pyramid of Zoser which was built of stone. But because stone is a solid material unfit for use in this type of architecture, it disappeared to give place to a new type of architecture.

The tombs of the First Dynasty are, even, characterised with a type of architecture known only in Egypt. This is the pyramid-shaped type exemplified in tomb 3038 of Saqqara which belonged to Enezib (5p. 82 Fig. 43), one of the Kings of the First Dynasty. This second type came from the south. Originally the superstructure was constructed of a rectangular tumulus faced with brick. Later this superstructure developed into an elongated pyramid form. (5 p. 146 Fig. 85).

If those new-settlers had really influenced Egyptian architecture, this would have been evident in Upper Egypt, i.e. the route on which the new comers came, as is assumed, according to the scenes on the Gebel El-Arak Knife-handle.

These same scholars presumed that the Egyptian writing or the idea of Egyptian writing was borrowed from the Sumerians, basing their theory, among other things, on a drawing of sledge (59) both in Egypt and Jamdt Nasr. This cannot be accepted. For the sledge is an important vehicle in transporting stone in Egypt where stone of different kinds is abundant and is used for making huge statues, e.g. the statues of god Min (These three statues are now kept in the Ashmolean Museum, Oxford) (13 a, p. 165 no. 33) from proto-dynastic period and made of limestone. Huge blocks of granite were even used in the tombs of the First Dynasty, e.g. the tomb of King Den, Fifth King of the First Dynasty in Abydos (5, p. 80); a temple built in stone from the Second Dynasty is recorded on the Palermo stone (59 p.58-59). But in South Mesopotamia such stone was not in use, but buildings were in bricks. For this reason, they never cared for the sledge, but they developed the cart. And if the Ancient Egyptian had borrowed any thing from the Sumerians, this would have been the cart.

However, one of the most characteristic features of the ancient Egyptian language is the alphabet, since it was written on stone about 3200 B.C. On the palette of King Wadjet, the snake represents the letter dj. On the palette of Narmer are the two letters (T), and (T). reading t-at, meaning vizier, or letters (S) in the name of Smerkhet, and the two letters (q) and (c) in the name of qa-a or (R), (H), or (P), on the jar-sealing of queen Nemathap; or letter (B) on one of the stelae of the side-tombs in Abydos, on the Palermo stone are recorded the names of first kings who preceded. Menes.... They have letters such as (S), (N), (T), (I) and (W). It seems, then, that writing had originated in the Delta a long time before the accession of the First Dynasty especially that this style of writing had already been standardized and fully developed, not a mere attempt. Moreover, no Sumerian loan words were found in the Egyptian language.

Frankfort, who proposed this theory, was compelled to admit, as is stated by A. Gardiner, (68p.397) that the Babylonian phase when similarities were at their height was the so-called Jamdat Nasr period, dating approximately to about the beginning of the first Egyptian Dynasty. Then it was that hieroglyphic writing first emerged in Egypt, though traceable in Mesopotamia some what further back, as he said. But this is in fact untrue. For the period of the Sumerian Dynasties when the language became known at its beginning is three or four centuries later than the beginning of the First Egyptian Dynasty. How then, could the Egyptian writing be derived from the Sumerian writing which had not yet come into existence. Thence forth it is more probable that the conception of writing a language was taken from Egypt to Mesopotamia by the foreign stone cutters or by the traders who used to travel among those countries of the Arabian peninsula or, via Palestine.



# Dates Of Beginning Of Dynastic Period in Mesopotamia

B.C.	Dyn. I	Kish	Cambridge Ancient History
2700	Dyn. I	Ur	
2550	Mes-anne-padda	First King of Dyn. I Ur	Kramer (101)
2600	Mes-anne-padda	First King of Dyn. I Ur	Georges Roux (47)
2600	First Dynast. Uruk.		Georges Roux
2750	Proto-Literate Period	Jamdt Nasr	Saggs (48)
3100-2800	Beginning Of Dynastic Period		Saggs
2800			
	The Beginning Of Dynastic Period in Egypt.		
3100	W. Hayes in Cambridge Ancient History (55)		
3400-3200	W. Emery. The Beginning of the Dyn. (5) lies between these two dates.		
3200	Moustafa Amer. (15)		
3200	Ahmed Fakhry. Pharoanic Egypt.		
3300	Drioton Vandier. (67).		
4000-3200	The Period of Nagada II. Moustafa Amer. (15).		

No doubt the Gebel El-Arak Knife with its reliefs is a pure Egyptian work. This type of knife was never known in Mesopotamia while there was found in Egypt a number of them with handles engraved with figures of various animals arranged in rows. The measurements of each animal do not exceed half cubic centimeter. This is an evidence of a high standard of efficiency, Among those animals were giraffs, nightingales, elephants, lions, bulls, antilopes, deers' ibexes, and dogs. Some of the depicted scenes illustrate actual events taken from nature such as an elephant treading down two coiled snakes (13a, 15, 28, 45, 46, 49).

The Narmer palette undoubtedly represents the highest standard of Egyptian art at the beginning of the historical period and it is, as well, an evidence of, an experienced artist with a deep background of traditions. (a)

There were also discovered thousands of stone-vessels of alabaster and other porphyric stones in various forms from the protodynastic period (5) and the early historical period engraved with names of **kings** of the First and Second Egyptian Dynasties. They all show a high standard of relief, sculpture and composition.

The knife of gebel El-Arak truly falls in its exact frame of the time, while Jamdt Nasr alabaster Vase stands unique in its environment. Alabaster is not from the land of Mesopotamia and has no history there, but shines forth suddenly together with the head of a priestess (48) in an environment utterly strange to them. However, the style of drawings on gabal-El Araq knife is different from that of the Mesopotamian Vase.

The sculptured men on the vase are distinguished by a big nose and a projection at the back of the head, bulky legs, and unnatural small and inadequate chest. which is inconsistent with the normal human body inspite of an attempt of the artist to draw an additional line parallel to the outline of the figure, indicating anatomy.

The lines are strong but the relief is simply flat with no depth. On the other hand, the Egyptian relief on the Gabal El-Arak Knife-handle is different. The human body shows elegance and uprightness of form, and the artist shows a profound conception of proportion. The elongated head is typically Mediterranean. The drawing of the person in action shows accuracy in understanding of movement and an ability of its execution in three dimensions. the third dimension is clearly expressed. As for the shoulder of the Egyptian depicted in battle, the arm begins right at the shoulder with roundness towards the top, then

a : For other palettes see : Raymond Weill : Recherches sur la Ire Dynastie et les Temps Prépharaoniques. (Le Caire 1961) Vol II. chapitre XIX, p. 169.

turns down to join the upper-arm. This style is only known in the Egyptian art in order to depict the whole figure in side-relief, while in the Sumerian shoulder, the shoulder-muscle joins the tri-muscle at the shoulder-level.

The sculpturing of animals is, even, different.

The art of metalurgy, and the art of sculpture, as is explained above, are pure Egyptian arts. A proof of this are the finely sculptured pieces found in that period and which developed in later periods to the highest level, the influence of which on the arts of the neighbouring countries is manifest. Thus Egypt could not have copied Sumerian art. On the contrary S. Kramer admits in his book on the « the Sumerians» (101, P. 101) that the craftsmen...«came, at least, originally, from foreign parts to practice their skills in connection with the construction of temple» This is natural. How could a country destitute of wood, stones and metal excel in arts where no raw materials existed? However, the Jamdt Nasr culture was undoubtedly later than that of Naqada II., and was simultaneous at best with the first Egyptian Dynasty. For the beginning of the Sumerian Dynasty which is considered to be the beginning of the literate age, was three or a four centuries later than the beginning of the Egyptian Dynastic age.

Both Grahame Clark and Stuart Piggott in their book on Prehistoric Societies (32p. 215) admit that the Egyptian Civilization is African and not western-Asiatic, because it is constituted in the conception of divine Kingship which was alien to the western Asiatic world. For the oldest royal house in Mesopotamia is contemporaneous with the Fifth Egyptian dynasty. But truly the Egyptian civilization is not African, but purely Egyptian. For in Africa, at that time, no such regime, ever existed.(43).

This state of condition remains in Africa for a long time, at least during the Old Kingdom of Egypt, as is evident from the inscriptions of caravan-commanders such as Uni, Herkhuf and others who were exploring the regions of Africa during the Fifth and Sixth Egyptian Dynasties. One main reason for the cultural development in Egypt was the huge agricultural wealth of raw material and the existence of gold in the Nile Valley, and amassing all these in the hands of one person, i.e. the person of the King.

This enables the King to achieve a development which was impossible in any part of the world at that time. For Egyptian Kingship played a main and effective role in the development of civilisation. A sure and evident proof of this is the fact that at the fall of Kingship due to famine which occurs as a result of the failure of the Nile-flood, or because of wars and foreign invasions, or due to the spreading of an epidemic, development ceased and civilisation collapsed :

But if those new-comers did not come from Sumer, where did they come from?

Among the things noted on Gebel-El-Arak (PL.I) knife-handle is the figure of that man standing between two lions, and the region over which he presides, it has lions, ibexes, and hunting dogs, a scene which suggests links with Libya. (a) It is said that the figure of this person is similar to a figure of a man hunting lions in a scene depicted on a stone - stela found in south Mesopotamia from Jamdt Nasr period (Plate 2). It is even said that this man came from the land of Mesopotamia and that he was a Sumerian. But if we re-examine the scene more carefully, we will notice different features.

1. This man is unique in Egyptian art of that time, and it is also unique in Iraqi art of that period.
2. In both scenes the man is depicted with lions. In the Egyptian palette, there existed also ibexes and dogs in an arid area, and not agricultural land of the kind of Mesopotamia which is a region of attraction.
3. The similarities between the two men does not lie in the way of sculpturing the bearded face but rather in the dress. On his head, the man seems to be wearing a turban fixed with a ribbon. His long hair is pushed back, the chest is not manifested, but probably naked, round his waist he wears a kilt which goes down below the knee.

This is the only representation of the man in Egypt at the time and the only representation in Mesopotamian Art, though the Mesopotamian one is few centuries later than that of Egypt. The former is of Jamdt Nasr period which is contemporaneous with the beginning of the Egyptian Dynasty. In the opinion of the writer, this figure does not represent a Sumerian, but depict a chieftain of an Arab tribe living on the edge of the desert. As a result of certain conditions this tribe pushed their way into Egyptian agricultural region more suitable for a settled life. They were incorporated and fused with the earlier inhabitants. The two together made the Nile-valley civilisation. This Figure is important, because it is the first representation in history for bedouin Arabs, with definite features, who immigrated from their desert region to settle in the Nile-valley and the land of Mesopotamia. Few centuries passed before we see once more this figure on the label for King Den of the First Egyptian Dynasty, discovered in his tomb at Abydos. The label is made of ivory (height cm. 5.5); showing king Den (a) striking a bedouin, probably from Sinai. The Mesopotamian figure is more similar, in a way, to the figure of the prisoner on Den's label.

a The Cambridge Ancient History. Plates to Volumes I and II, New Edition. Cambridge 1977, Pl. 28 B.



Another is a dicestick of ivory sculptured in the form of a bedouin which was found by Petrie in a box of gaming pieces of King Qa'a of the First dynasty (PL. 3). (5 p. 250; 88 nos. 904, 905) The depicting of the Asiatic Arab bedouin, and their names within signs representing the borders of their regions, continued on the walls of temples, on bases of statues, and in historical inscriptions. Edel the German Egyptologist has been collecting these names for publication. The oldest representations were found also on a statue of Kha'sekhem from the second (5, pl. 31) Egyptian dynasty, from schist and is kept in the Egyptian Museum. Reliefs of them were also found on the walls of the Funerary temple of one of the kings of the Fifth dynasty, the so-called Sahure. The private tombs of the New Kingdom have also representations of them. There is also a collection of different statues, some of which are fixed in the walls of temples. Moreover there is a collection of ivory statues representing prisoners from prehistoric times (13). Collecting pictures and statues of these people would fill volumes. They appear for the first time in the reliefs of Gebel AL-Arak-Knife-handle. They are called the dynastic race, or the «armenoids.» (59, p. 35). The First scholar who drew attention to them is Dr. Derry (17) who had examined a large number of the Egyptian skulls, and he stated that there were two kinds of human skeletons. One type is extraordinarily small in stature with an elongated narrow skull. This is the man of the proto-dynastic age. The other type is more massively built and his skull (about 139 mm. in width) is broader (mesaticephalic), than that of his predecessor. To many scholars in the past this was unacceptable, But recent excavations carried out in archaeological sites in the north of Saqara (24) and Helwan (25) prove the existence of these people and that they had entered Egypt from the north driving southwards into upper Egypt as far down as Abydos, contrary to what had been believed. But the term «armenoid» is still controversial.

It is believed that this race had come into Egypt from different places, in successive waves of invaders under different chieftains and at different times following various routes. This view is confirmed by the many emblems and symbols of gods and countries represented on the ware of Naqada II (46 p. 53). These people did not meet strong resistance since the population of Deir Tasa and Badari was estimated round about 20000 people (11 P. 197). The whole population of Egypt at that time is numbered between 100,000, and 200,000 persons. Thus the Nile-valley was then welcoming new-comers. But the kind of science which these people brought is uncertain.

## The Historical Ages

The Semitic Asiatic (The word Asiatic is used here to denote the inhabitants of Palestine, north Arabia, and Sinai in general) penetration into Egypt never ceased in later ages. They persisted in their attempt to seize sovereignty over the country whenever that seemed possible. This was evident on the palettes of Den and Ka'a, kings of the First dynasty as is mentioned above, and on the inscriptions which the kings of the Old Kingdom carved on the rocks of Sinai (69) and which indicate the serious peril of those people. We have even, a number of documents and papyri which mention them. One of the most dangerous invasions took place towards the end of the Old Kingdom. For the Asiatics who were called in the old text (sttyw) started attacking the borders of the Red Sea and destroyed a naval base for a king who had built a ship for an expedition to Punt (66). Because of the miserable social conditions, the bedouins succeeded in their advance in the Delta and seized the region of Memphis. Indeed these troubles had begun in Palestine since the beginning of the sixth Dynasty (about 2181 B.C.) and because of which king Pepi I was compelled to send a naval campaign to re-establish peace and maintain order in the region (67,68).

Uni recorded that his king recruited a large army of many tens of thousands from the entire land of Egypt and Nubia, and that the king sent him forth at the head of this big army to put an end to the rebellion taking place at the nose of the gazelle (it is believed to be Mount Carmel). Uni had to go to this country five times until he was able to repel the Asiatics and to inflict punishment on the sand-dwellers who were threatening Egypt. He harried their lands, cut down its figs and vines and cast fires into their houses. Uni recorded the events of those wars on a stone-slab from his tomb at Abydos (65,72). This indicates the seriousness of the insurrections in that area, but he did not give an explanation of its cause. For this the troubles continued and was one of the causes which led to the downfall of the Old Kingdom.

The first important papyrus which illustrates the events befalling the country at the end of the Old Kingdom is a papyrus well-known under the title "Admonitions of an Egyptian sage" which is kept in Leyden Museum. It is of a time later than the Old Kingdom. The papyrus begins with a long series of brief paragraphs which portray the condition of destruction and havoc were brought about by low-born adventurers and Asiatic invaders pushing their way into the Delta. (73, 74, 75).

A second papyrus (Leningrad 1116A) is that of the Heracleopolitan Merykare (77) of the Nineth dynasty. It speaks also of the Asiatics Amu in the Ancient Egyptian Language who infiltrated the eastern



regions of the Delta. Though the King's forces managed to inflict a defeat upon those tribes, they could not drive them out of the country; they remained in the Eastern Delta, and maintained in large part their own independence, they collected their own taxes in addition to that which they levied on behalf of their overlord (61 p. 466).

The inhabitants of the Delta were of a mixed population of the ancient Egyptians and the new Asiatics who had come in the time of one of his ancestors, king Mery-ib-r'-Akhtoy.

The papyrus of Neferty (62, p. 33; p. 76) was written by an Egyptian priest from Bu-Bastet and one of the supporters of king Ammenemes I of the Twelfth dynasty. He depicted in his writings the chaos and famine which prevailed in the Eastern Delta, and prophesied the coming of Ameney the saviour, to rid the country of the Asiatics who drove their way into the Delta spreading havoc, panic and poverty. Ameney referred to in this papyrus is no other person than the founder of the twelfth Dynasty. The papyrus of Neferty evidently confirms the infiltration of the Asiatics Amu into the Delta. There was mentioned as well in this papyrus the walls of the ruler built to repel the (sttyw) and to smite the sand dwellers.

The walls of the ruler were even mentioned in the papyrus of the same date. The site where these walls of Ammenemes were built is not known, but the fact that they were mentioned twice stresses the seriousness of this danger which was anticipated on the eastern frontier. The increasing power of those Asiatics is again indicated by the fact that the brother of the prince of Retenu was assisting the power of this prince who might have exercised dominion over a large area extending from Byblos to Sinai (68).

In the Brooklyn Museum, New York, there is a fragmentary papyrus dating from the first and second regnal of king Sobek Hotep III of the Thirteenth dynasty (mid-eighteenth century B.C.) (71,80), on its verso a list of slaves, or labourers serving a Theban household of a single high Egyptian official (62, p. 10), among them 45 Asiatics, men, women and children. They might not be specifically proper slaves, since there is no contemporaneous evidence of a military capture of Asiatics, but they could have been sold in trade by their countrymen as is illustrated by the story of Joseph (a). The Asiatic name was followed by the new Egyptian name given unto him. Those worked in various jobs such as cooks, brewers, weavers of linen and wrappers of cloth. One of the male-slaves was a tutor. But this should not suggest that he brought a new innovation, but probably he was teaching his own language to Egyptians who would be travelling into those regions.

a : See also : Abd el-Mohsen Bakir : **Slavery In Pharonic Egypt.** ASAE, Sup. Cahier, No. 18. Cairo. 1978. p. 65.73, 109.f.



Fig. 2 The Asiatics arriving at Beni Hassan.  
Tomb of Khnum hotep.

The presence of 45 of those Asiatics in one household may signify the existence of a large number of them throughout the country, a fact which compelled Ammenemes to sculpture his sphinx with Asiatic features (a).

The Asiatics were then coming into Egypt systematically during this period. On the walls of a Middle Kingdom tomb in Beni Hassan (4, 79) of a certain Khunum-hotep there was depicted the arrival of a clan of the Semite Asiatics from western Asia (fig. 2.) with their brightly coloured tunics and their weapons under the guidance of their chief Absha; they were thirty seven of them, men, women and children, bringing stibium (black pigment) from Shutu in central Transjordan to the nomarch of the district.

But the most dangerous of those people who were able to enter Egypt and dominate it were the Hyksos (62, 81). They were of the same Asiatic stock who had infiltrated into Egypt in former times, and who were called in Egyptian texts (Amw, Stjetiu, Mentju of Setjet, men of Retenu, hryw s<sup>v</sup>, ).

Opinions differ about the manner of their rise to power, whether this was achieved by an outside invasion, or by an internal act. The Hyksos are a mixture of Semites, and other elements of Indo-Europeans and Hurrians. They governed Egypt for over 150 years until the kings of the Seventeenth and Eighteenth Dynasties were able to overthrow their yoke and to drive them out of the country.

During the New Kingdom the Semite Arabs from Sinai and Syria continued their overflow into Egypt, either as peaceful traders or warhostages. The military inscriptions of Thutmosis III and Amenophis II as well as other kings are full of such evidence. A good example of this is what is recorded by Amenophis II in his inscriptions that he brought ninety thousands of prisoners and hostages from those countries in his ninth year alone : 217 princes of Retenu, 179 brothers of princes, 3600 Apriu 15,200 Shasu-beduins, 36,000 Kharu, 15,600 living Neges, 30652 of their adherents 101228, total 89600. (The figures given total 101228). (2;83).

These Asiatics used to work in the temples of the gods, palaces of kings, households of princes, or on special plantations for them; others were assigned to industry (74). Of the maids, many became wives. The free men held high posts in the government; others worked in the Foreign office where the cuneiform script and Akkadian language were in use for foreign correspondence. In Tell-el-Amarna,

a : Encyclopédie Photographique De L'art : Le Musée du Caire par Etienne Drioton (France, 1949) Pl. 61.

the capital of of Akhnaton in Middle Egypt, a large number of those letters were found. Those were messages exchanged between the Kings of Egypt, Kardoniash, and Syrian princes (84). They are important for the light they shed on the affairs of the Middle East at that period. This collection of letters inscribed on brick tablets are divided now between the museums of Cairo, London, and Berlin. There must have existed in Thebes, as well, a large collection of tables and papyri which disappeared.

Since those ages the flow of Semite Arabs into Egypt never ceased. They constitute the main element of the Egyptian nation. But the main invasion which had indeed changed the nature of the Egyptian civilization, language and belief, was the Islamic conquest.

### The Evidence of Language : ...

The Ancient Egyptian is a branch of the Semitic group.

This subject has been discussed at length by many scholars whose books are given below.

- |                    |   |   |
|--------------------|---|---|
| A.B. Gardiner      | : | <b>Egyptian Grammar.</b><br>3rd. Edition, Oxford, 1957.   |
| 1. Lefebvre        | : | <b>Grammaire de l'Egyptien Classique, 2nd.</b><br>edition, Cairo 1955.  |
| F. Calice          | : | <b>Grundlagen der aegyptisch-semitischen wortvergleichung.</b> Wlechung. Hien 1936, (Beihefte Zur "Wiener Zeitschrift fur die Kunde des Morgen - Landes" Heft I.) |
| T.W. Tacker        | : | <b>The Relationship of the Semitic and Egyptian Verbal Systems.</b> Oxford, 1954.   |
| Abdel Mohsen Bakir | : | <b>Synopsis of Principles of Egyptian Language in its Golden Age, Cairo. In Arabic</b>  |
| Abdel Mohsen Bakir | : | <b>An Introduction To The Study of The Egyptian language.</b> Cairo. 1978.  |
| J. Vergote         | : | <b>Vocalisation et origine du système verbal égyptienne.</b> dans <b>Chronique d'Egypte.</b> Tome XXXI No. 61 — Janvier 1956. p. 16 — 53.                         |

**A short list of Ancient Egyptian and Semitic - Arabic words of similar roots and meanings**

Ancient Egyptian	Transliteration of the words	Arabic	English
db'	جبع (أو-صبع)	أصبع	finger
snw	سنو	ثان	two
snnw	سننو	صنو و ثان	second
sn	شن	صنو ، أخ	
nb	نپ	رب	lord
m-c	مع (بالضمير معي-معك)	مع	with
tm	تم	تم	be complete
hs (y)	خسي	خاسي	vile, coward
snb	سنب	سلم	healthy
p th	بطخ	بطخ	cast
hpi'	خب	خب ، ذهب	go
ndr	نجر	نجار	carpenter
ftft	فتفت	نط ، فط ، فادفد	leap
mw	هو	ماء	water
ym	يام ، يوم	يم	sea
i'h	يعح	يرح (القمر)	moon
hk3	حكا	حكيم ، حاكم	ruler
'ib	اب	لب ، لب	heart
smn	سمن	زمن	time
n ntr	ن-نثر (للاله)	نذر	votive offering
sab (zab)	ذاب (أو) ساب	ذئب	jackal
hnm	خنم	غنم محرفة من الكلمات المصرية	sheep
kdf	قدف وبالقبطية قوطف	قطف	gather flowers
htm	ختم	ختم	seal
mut	موت	موت	death

(a) See Also : Coptic Etymological Dictionary: Compiled by Černý : Cambridge, 1976, p. 374 — 383.

hsh	حسب	حسب	count
psg	تسج ، يتسكك	بصق	spit on
'ink	انك (قبطي نوكي)	أنا (أعبري نوكي)	I
k	ك	ك (الضمير)	thou
'i	ي	ي (الضمير)	my
smr	سمر	سمير	friend
m.r	أأمي - را (ميرا)	أمير	prince
prt	برت	برد	winter
nbs	نبس	نبق	zizyphus
v			
sndt	شندت	سنط	acacia
'inhmn	إنهمن	الرمان	punica granatum
'isr ('izr)	اسر	أثل	tamarisk
hbny	هبنی	الابنوس	ebony
Qmh	قمحوا و قمح (عیش)	قمح	bread
prt	برت	بر	seed
dt	زت	زيت (زيتونة)	olive
'ink	انك	عائق ، ضم	embrace, gather together
'iyra	إيرا	إيل	hart
idn	ادن	إذن (ودن)	ear
'in	إن	إن	particle
brkt	بركت	بركة	pond
brg	برج	بلج	to be happy
brg 'brk	برج ، برق	بلج ، برق	shine glitter
dnh	جنح	جناح	wing
kd	قص	جص	gypsum
h b s	حبس	حبس (ليس)	put on
hfn	حفن	حفل (حفنة)	great quantity
hm3t	حات	حمض (ملج)	salt
hr	خر	خر (وقع)	fall
mrh	مرح	رمح	spear



3bi	أب	أحب	wish for
sfn	سفن	صفا ، رق	be kindly
sft	سفت	سفع ، ذبح	slaughter
ka.t	كات	kuss	vulva
bah	باح	باه	pr-nfr
krht	قرحة	قرحة	of ancient family
krht	قرحة (مخصص قدح)	قدح	vessel
dr	در	درأ ، طرد	expel
drp	درب	قرب ، ضحى	offer
dkw	دقو	دقيق	powder
d'm	زعم صعم	سام (ذهب أبيض)	fine gold
pr-nfr	برنفر	برنوف	a plant
mdl	مجي	بصل ، بيصرو	onion
dph	زفاح	تفاح	apple
tnm	نم	تلم	furrow
hmhm	همهم	همهم	roar
dar	زنب	شنف ، كنف	basket.
dnh	زنج	ذراع	arm
wrt	ورد	ورد	rose
rkrk[ylt]	ركركيت	ركرك	be weah ' became sebten
snwt	شوت	شونة	granary
rhb	رهب	لحب	smoke
nhm	نهم	نهم	roar
nfuf become rotten	نفنف	لفلف	totter
krr	كرر	قلة	jar
trt	ترت	طورية	hoe
dbt	طبت	طوب	brick
sdm	سجم	سمع	hear
sf.t	سفت	سيف	sword
s'd	شعد	شرط	cut down
spt	سبت	شفة	lip
tbn	تبين (طين)	طبل	drum
tfn	تفن (طفن)	طفل	child
'dt	عدت	عداوة (عداء)	enmity
'3	عا	عين	donkey

'n, 'in	عين ، عن	عين	eye
krnt	قرنة	غرلة (قربة)	foreskin
pha	فخا	فخ	net
pss	نشش	فشا	spread out
kd	قد	قدر	pot
knd	قند	كمد ، كند (كنود)	angry
knd	قند	قرد	ape
n	ن (نا)	لا	no
nsb	تسب	لسب	lick
'iwn	يون	لون	colour
msh	مسح	تمساح	crocodile
mska	مسكا	مسك ، جلد مدبوغ	skin
mgrt	مجرت	مغارة	cave
n'	نع	نعى	to announce the death of
nk		نكح	copulate
wdn	ودن	وزن	weight
wsh	وسخ	وسع	large
wd	وص	وصى	command
wh't	وحات	واحة	oasis
m	م	ما (	interrog.
m	م	ما	imper. of the negative verb
Pa-ym	بايوم ، اليم	الفيوم	Fayum
smnw	شمنو ، شيمونة	الاشمونين	El-Ashmunein
skr	سكر	سقارة ، سكر	Saqqara
sbty	سبتى	صفت (مثل صفت ميدوم)	wall
Names of Gods			
tm, ltm(w)	تم ، إتمو	اتوم	Atum
Hr	حر	ادم	Adam
Pth	بتح (فتح)	حوروس (حر)	Horus
sth, St	ست	بتاح (فتح)	Ptah
skr	سكر	شيطان (ست)	Satan
		سكر	Sokar

We have been trying to point out in the preceding pages the role which the coasts of the Arabian Gulf and southern Arabia played in the world trade between the countries of the Middle East, its contribution in transmitting civilization between the countries of the region, or in its development since the beginning of civilization. Those contacts had never ceased, though it is not well known in all its manifestations due to lack of excavations. Such contacts are evident in two areas at least, one is the south-west known as Yemen, the second is the north-west region which extends from Mada'in Salih (al-Hijr) as far as Palestine. Few of these influences will be examined in the following pages.

#### A Throne from Dar el-Baidha (Marib).

From Marib (Mariaba) Ahmed Fakhry published several blocks of stones which were studied by J. Pirenne who was able to demonstrate that those blocks constitute a part of a throne and succeeded in making a reconstruction. From Pirenne's study it seemed that the throne was made and decorated according to the ancient artistic styles of Egypt and Mesopotamia (Fig. 3,4).

#### The Lotus Flower.

1 — An altar of quartz (height 31 cm., breadth 45 cm) was found, adorned with a relief representing four cases each is supported with a base, the middle part of which takes the form of the Egyptian lotus flower. (Fig. 5).

2 — Fragment of limestone (height 50 cm., breadth 31 cm.) decorated with two scenes. In the upper is a scene representing foliage, the lower part shows a couching ibex within a square adorned on each side with a lotus flower.

Ahmed Fakhry denies that this is the lotus flower, an Egyptian symbol, well-known and popular on the walls of the Egyptian Monuments (Pl. 4). He preferred to think that it represented a palm tree; for the lotus was unknown in South Arabia. But this is not convincing since the lotus flower was famous throughout the world. Its use was popular in large areas and it appeared in so far away places as Pizirik in south Russia east of the Caspian sea. There is no doubt that it had found its way to Yemen.

#### Palace-Facade-Decoration

In the archaeological remains of Dar al-Baidha in Marib, there were discovered two blocks of stone; (170 x 45 c.m.) their sides were adorned with a special type of decoration known in Ancient Egypt under the name of Palace-Facade decoration. It had been popular in

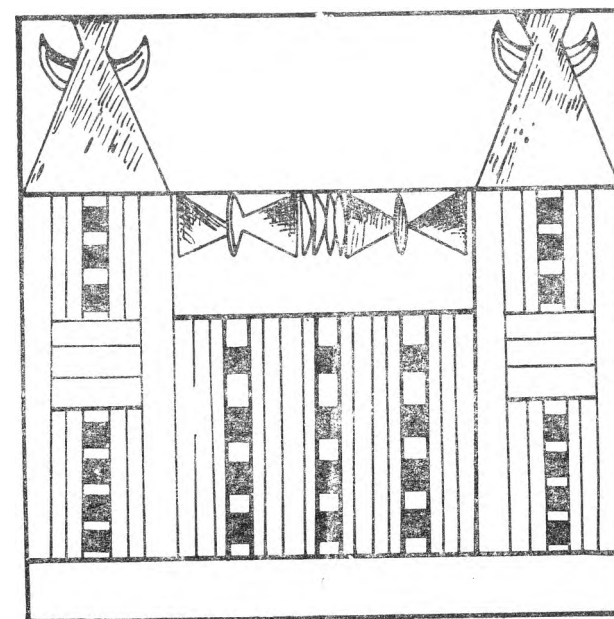
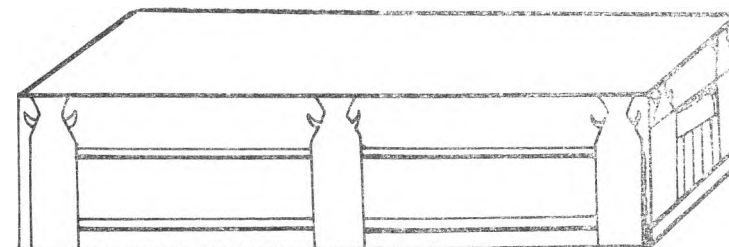


Fig.3. A Throne From Dar el-Baidha.

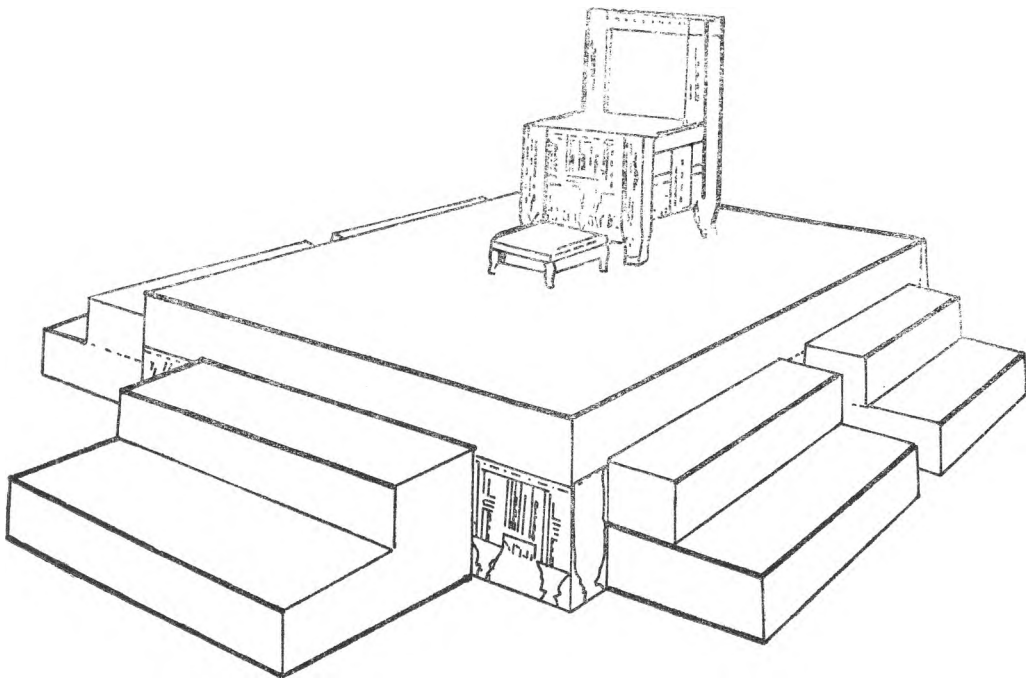


Fig.4. Throne From Dar el-Baidha.

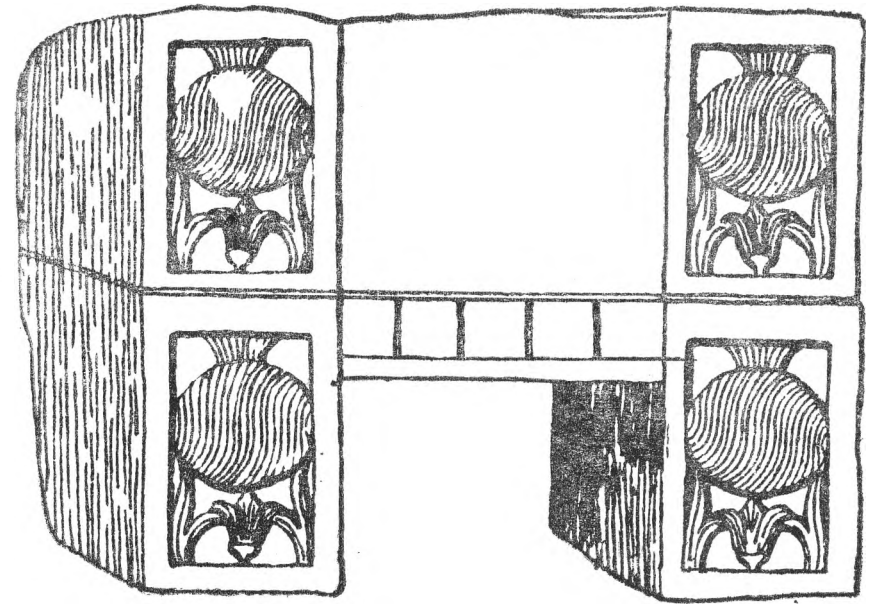
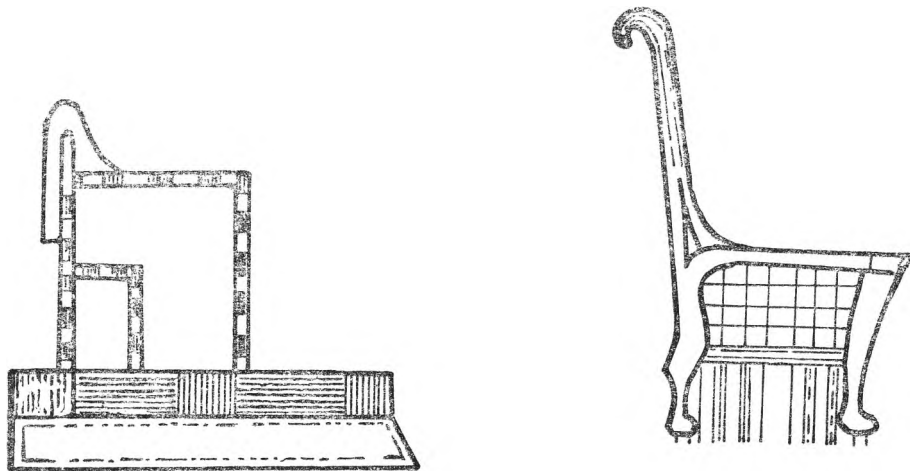


Fig. 5. An Alter of Quartz.

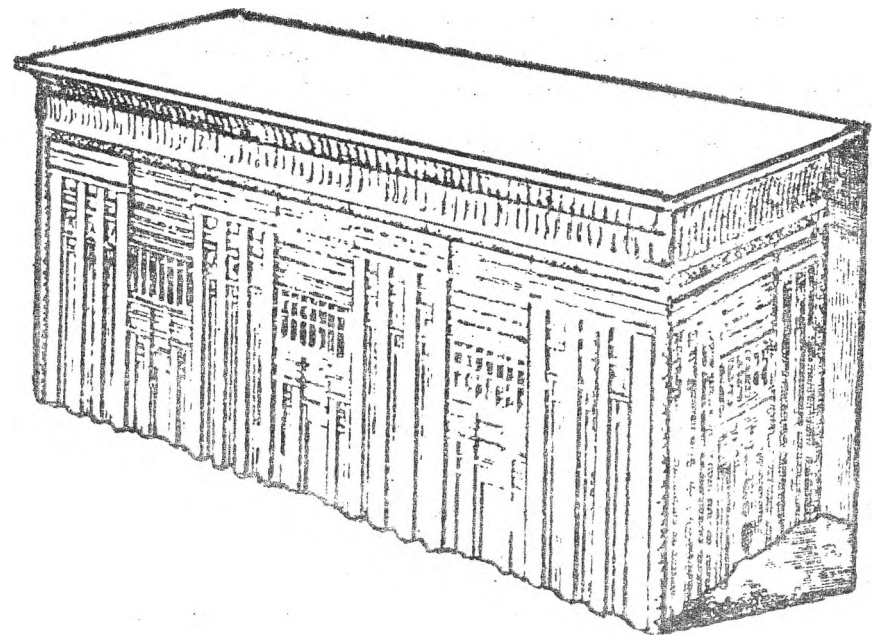


Fig.6. Sarcophagus of the Fourth Egyptian Dynasty.



Egypt since the earliest historical period in the Serekh-name of Kings, on the tomb-walls, on the sides of sarcophagi famous among which is the stone-sarcophagus of Mycerinus (fig. 6). The purpose of this decoration is to enable the soul of the dead person to go out of the tomb and to re-enter whenever he wishes. This type of decoration continued until the Roman times, though it became a mere decoration. In Arabia there were discovered a number of censers; their sides are adorned with this pattern e.g. censor No. 2011 (11, 5 x 9, 6 x 9, 6 cm.) and no. 2012 (5,5 x 9,6 cm.) in the American excavation (Pl. 6).

Other examples of this pattern are in Istanbul Museum nos. 1775, 1773. (88) (Altsyrien. Nos. 1275, 1276, 1277).

#### Statues :

In Arabia there was discovered a large number of statues of different types, some of which are sculptures according to the local models, others followed the Greek-eastern types and others sculptured in the ancient Egyptian style. This last collection is interesting to our study. The statues were found in Yemen, or in the north in the Nabataean kingdom PLs. 7,9,10,11. The Egyptian style is distinct with its straightness of lines, absence of movement, un-expressiveness of feeling forwardness of the left leg, the arms are either attached to the bust, or extending forward to hold a scepter or a stick, symbol of authority, while the other hand holds a seal with the owner's name. The dress is normally a kilt round the lower half, free from wrinkles, and tight with a belt round the waist; the statue is also distinct with frontality of outlook, and calmness of mind, being free from excitement. The body is perfect and sound (Pl. 8).

Those statues were not only found in Yemen, but also in Mada'in Salih and Taima. They are made of stone, or bronze.

Pl. 7 Bronze statue 6th century B.C. Its owner Ma'ad Karib wears a leopard-skin, emblem of the Egyptian priesthood.

Pl. 9 Bust of limestone kept in the store-house of the municipality of Mada'in Salih.

Pl. 10 Fragment of a statue. Stone. Taima archaeological area.

The ancient Egyptian style was popular throughout the whole of the Middle East, not only in the neighbouring countries; an example of that is a limestone statue found in Cyprus, now in New York the statue of course from Melos (round 550 B.C.) and the statue of course from Syracuse (500 B.C.) which is a reflection of the statue of Mena the Egyptian in Turin (2400 B.C.)

A second collection of statues is in the style of the Ptolemaic Alexandria school. The city of Alexandria at this period was the



Fig.7. A Phoenician Bronze Plate From Olympia adorned with Egyptian decorations

spiritual capital of the Greek World. It became the biggest city in the World since 200 B.C. Its population exceeded one million in the age of Augustus. One of the ancient text refers to «Alexandria is the comos, and all the lands are attached to her».

Among those statues is a bronze head found in 1931 which the prince of Yemen presented to the King of England, and is now in the British Museum. Rathjens thought that it belonged to a queen. Both R.D. Dussaud and M. Rostovtzeff recognized in it the dressing of the hair which is noticeable in those of Nabataean kings on their coins about 40 B.C. and they recognized in it even the Nabataean style which had originally come from Alexandria. Though R. Hencks placed it between 50 — AD. and this is more correct. It is believed that the bronze statues were brought from Alexandria or, from Gaza for the Sabaeen kings (Pl. 11). A bronze statue known as Lady bra'at (about cm. 75) falls under the influence of the new model of the gods which follows the Alexandria — Syrian School.

#### The Lion-rider of Timna

Made of bronze. It presents a child riding on the back of a lion holding in one hand an arrow and a broken chain which was attached to a ring round the neck of the lion. It is of a Qataban king. According to the inscription engraved on its base it is dated to the first and second centuries B.C. It was made on a model which was made in Egypt and brought to Yemen. (PL. 1, PL. 12).

Many of these statues were found in the burial chambers hewn underground to be a substitute for the dead in case the body was destroyed. The human skeletons were indeed smashed, burnt and mixed with funeral stelae and jewellery made of gold and silver which enticed thieves. The bodies were even put inside stone sarcophagi. All these are Egyptian traditions inspired from the Egyptian belief of resurrection.

#### The Tombs of the Nabataeans : Mada'in Salih :

The Nabataeans hewed their tombs in the rocks of the mountain after the Ancient Egyptian tradition though their tombs are less magnificent than those of Egypt, the inner walls of which were adorned with paintings and inscriptions. But the Nabataean tomb of Mada'in Salih is constituted of one chamber undecorated and uninscribed. Simple places of burial were hewn within the tomb-walls or hollowed in the ground. (Pl. 19) The Faced of the carved in the form of an Egyptian pylon adorned with the well-known Egyptian cornice (Pl. 13, 14) used in the Old kingdom tomb-stelae of the false door type. (Pl. 15). This type is even seen later in the tomb gates illustrated on papyri of the New kingdom (pl. 16). This type of false-door-stelae was popular all through out the ancient Egyptian history down till the Greco-Roman periods. It was even copied in regions outside Egypt

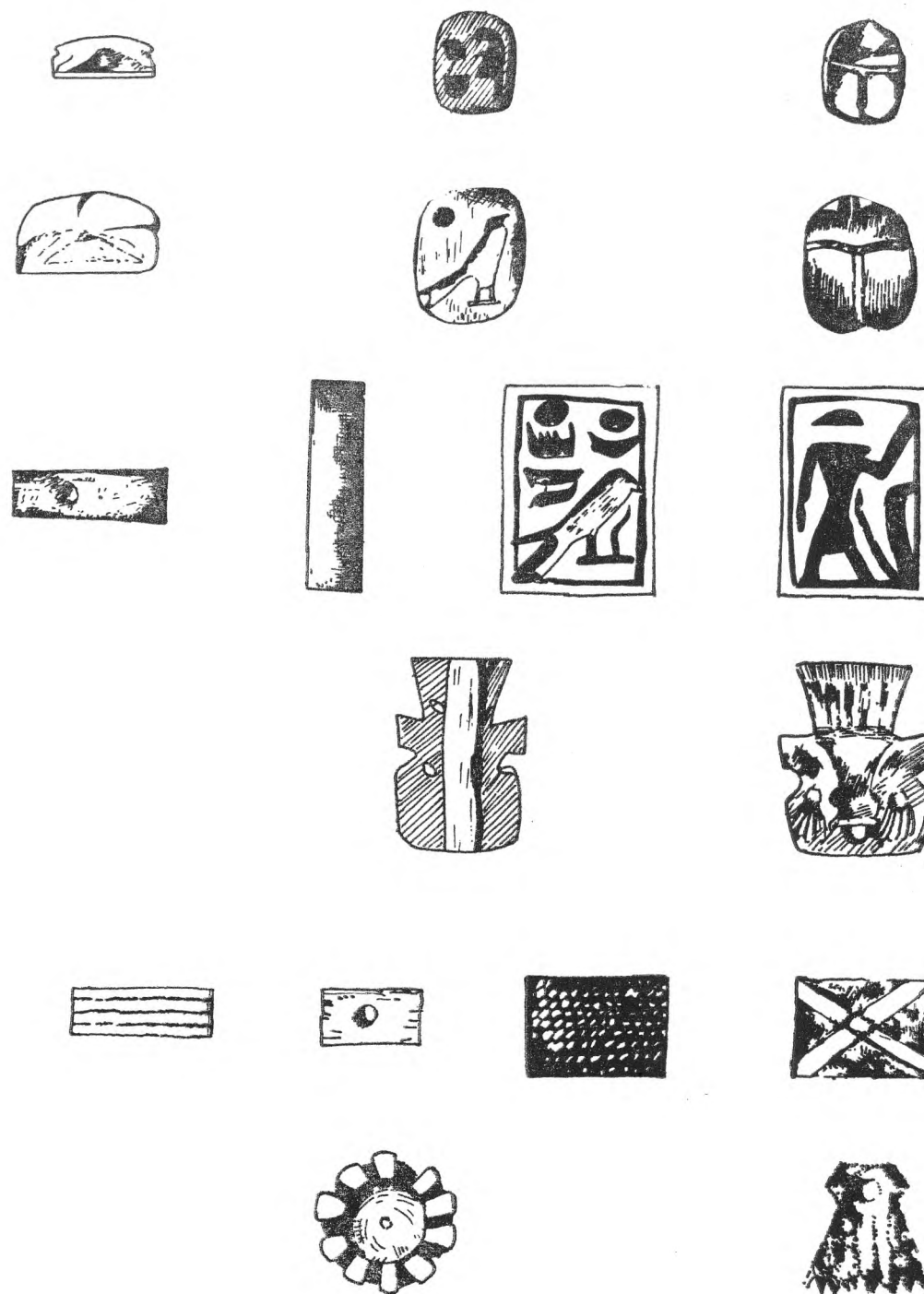


Fig. 8. Tgyptian amulets bought from Yemen

such as Syria (Pl. 17). The architraves of these rock-cut tombs are adorned with various decorative elements of religious nature some of which are derived from those of Egypt. An example is the circular flower which is a symbol of rejuvenation and eternal life. Other elements are the winged sphinx and the winged eagle. Both are derived from Egyptian origins in an Assyrian form. They all are symbols of the sungod, (pl. 18) who was worshipped in Egypt as well as elsewhere.

#### Egyptian Monuments In Yemen :

Small artifacts are discovered in Yemen in the ruins of Marib. Some of which came from ancient tombs uncovered by floodwater and which lie about 5 or 6 meters from the city walls. Some scholars, among them Rathjens, Wissman, Ansaldi and Ahmed Fakhry published these monuments. The collection which was bought by Ahmed Fakhry from San'a is small. It contains genuine Egyptian pieces, other are Phoenician copies (Fig. 8) One of the most important pieces is a scarab bearing the name of Amenophis III, and its workmanship proves that it is from the same period i.e. the 14 th. century B.C. Another scarab has the eagle of Horus and the sun — Disk from the 6th B.C., and a plaque bearing Thutmosis III. It is of a Phoenician work copying Egyptian art. It goes back to the 5th century. B.C.; another bears the name of the Egyptian god Bes. These artifacts at least is an evidence of stable trade contacts between Egypt and Yemen since ancient times. But it is more probable that Egyptians were living in Yemen; they went there as traders or experts in Yemen, in the same way as present day Egyptians go now to Arabia to do all kinds of technical work.

But what is more interesting are the lists of maid slaves in the temple of Ma'in. Eight of the names given are said to have come from Egypt; among these are **THBT TBA, THIU, AMT, SMS, BDR, AHTMU.**

More interesting even are the stone sarcophagi which are always being found in Marib and which indicate the existence of Egyptian specialists who were in charge of engineering and construction work in this region, such as temples; tombs, mansions, the famous dam of Yemen; and later in the Nabataean kingdom of the North. There is no doubt that the builders of the Marib dam were engineers from Egypt : for this dam was built between the eighth and seventh centuries B.C. and in these centuries neither the Greeks, nor the Romans had any experience in such projects. The only nation who was well experienced and capable to excute such gigantic constructions were the Egyptians. Their monuments are still standing everywhere a testimony of their genius and skill. Excavations, however, in Marib and other sites will reveal the true history of those areas.

#### Conclusion

From the foregoing study it is evident that Semite Arabs had entered Egypt since the predynastic period; they fused with the former original inhabitants to create a new element which composed the racial and civilized aspects of both original inhabitants and the new comers who reacted upon the beneficial environment in the Nile Valley and was able to achieve the highest level of civilization known to the world at that time; and no sooner the activity of this new power expanded outside the valley and exert deep influence upon the cultures of the neighbouring countries.

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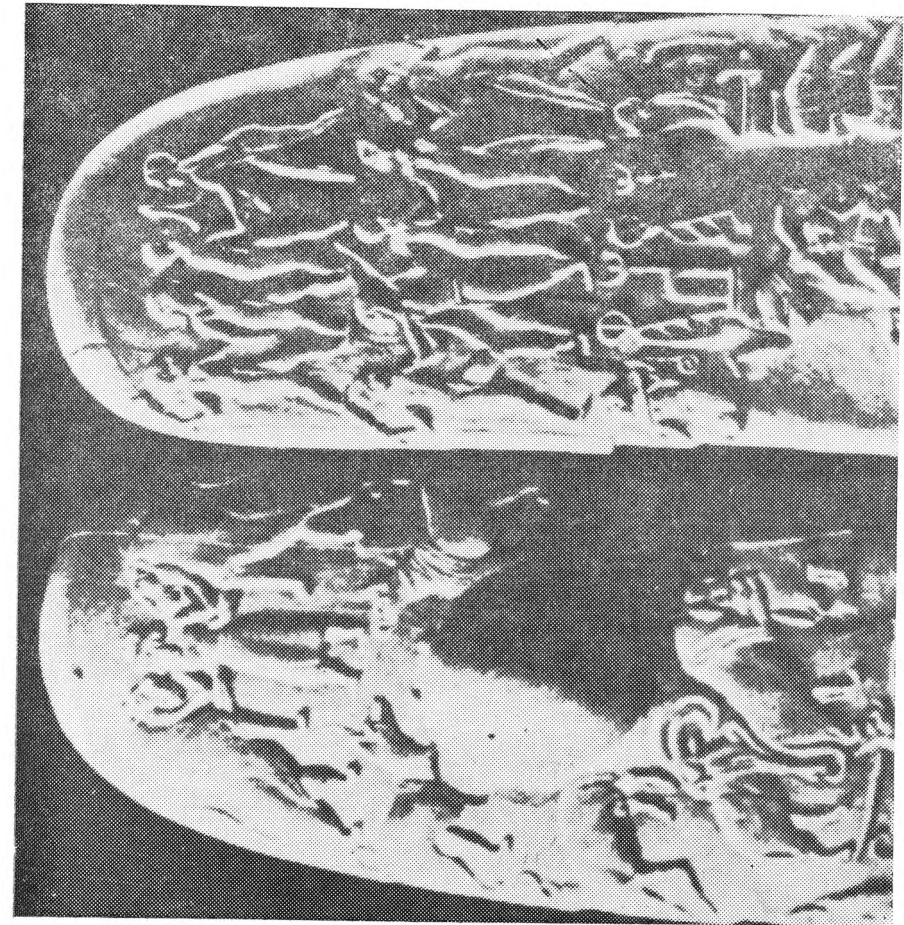
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## ABBREVIATIONS

- ANET : Pritchard : Ancient Near Eastern Texts Related to the Old Testament, second Edition. 1959.
- APAW : Abhandlungen der preussischen Akademie der Wissenschaften (Berlin, 1804 — )
- Arch. Orient : Archiv Orientalni, Journal of the Czechoslovak Oriental Institute.
- ASAE : Annales du Service des Antiquités de l'Egypte (1899 — )
- BM : British Museum
- Breasted AR. : J.H. Breasted, Ancient Records of Egypt Vols. I—V. (Chicago, 1906 — 1907).
- JEA : Journal of Egyptian Archaeology (London, 1914 — ).
- JNES : Journal of Near Eastern Studies (Chicago, 1942 — ).
- Mel. Dussaud : Mélanges syriens offert à monsieur René Dussaud. Two volumes. (Paris : Paul Geuthner, 1939).
- Erman, LAE : A. Erman, The Literature of the Ancient Egyptians. (London, 1927), a translation into English by A.M. Blackman of Erman's Die Literatur Der Aegypter (Leipzig, 1923).
- JAOS : Journal of the American Oriental Society. (New Haven, 1843—).
- SBAW : Sitzungsberichte der preussischen Akademie der Wissenschaften (Berlin 1882 — ).
- Syria : Revue d'art oriental et d'Archéologie.
- Urk. : Sethe : Urkunden des ägyptischen Altertums (Leipzig, 1903 — ).
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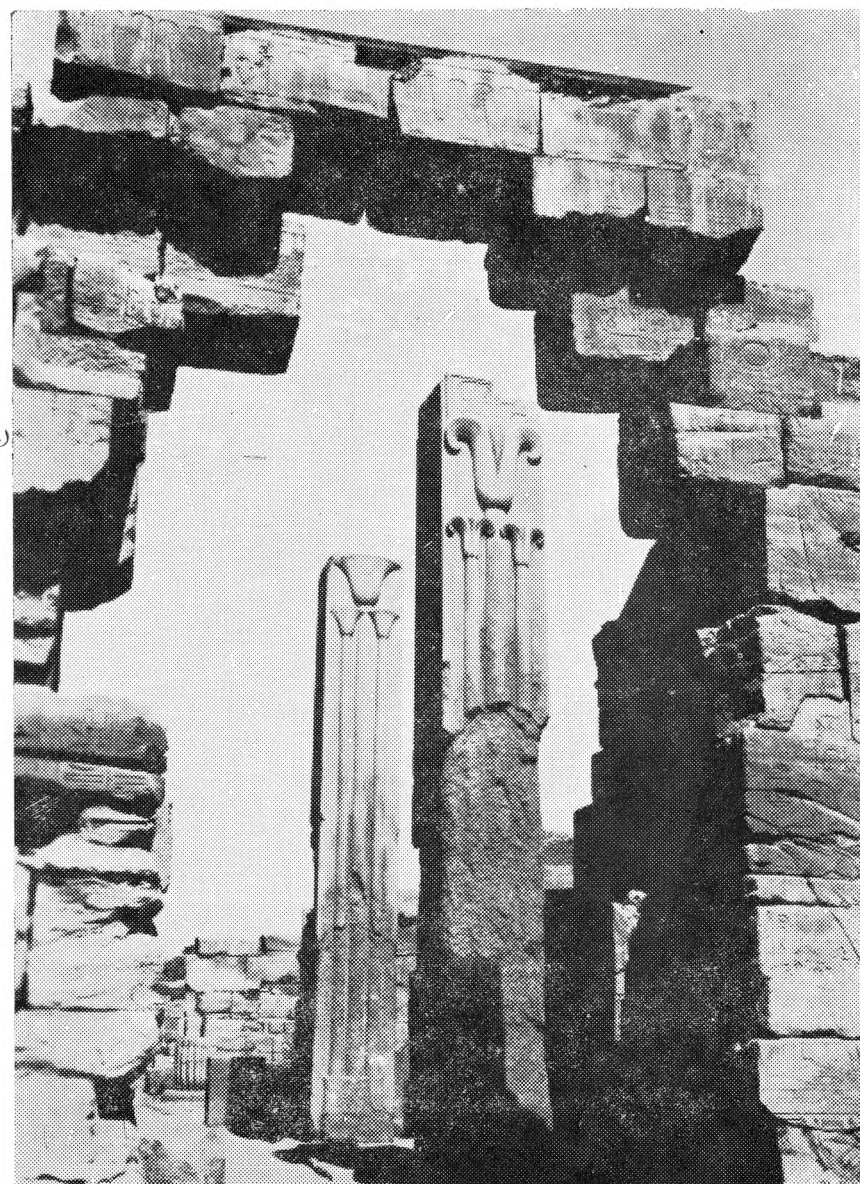
Pl. 1. Gebel el-Araq Knife — Handle. Carved Ivory. Right side with ships. Left side with man between two lions. Louvre.



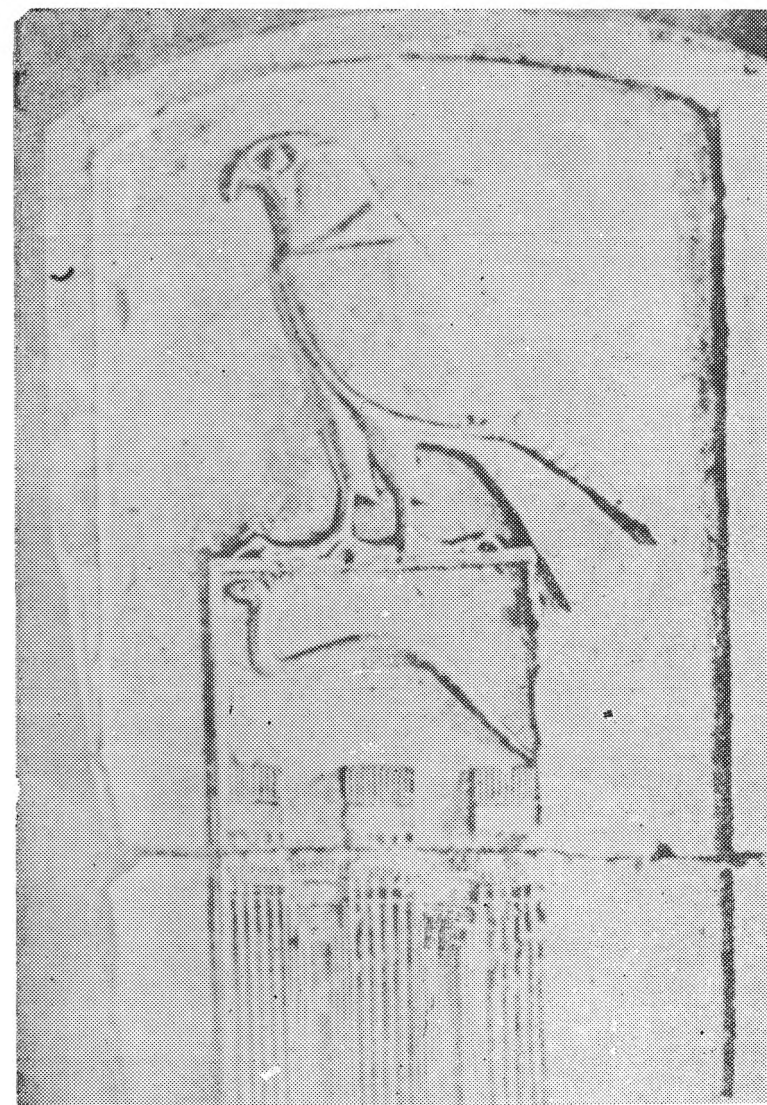
Pl. 2. Warka (Uruk). Granite stela depicting a lion-hunt.  
Iraq Museum. Note the head of the bedouin.





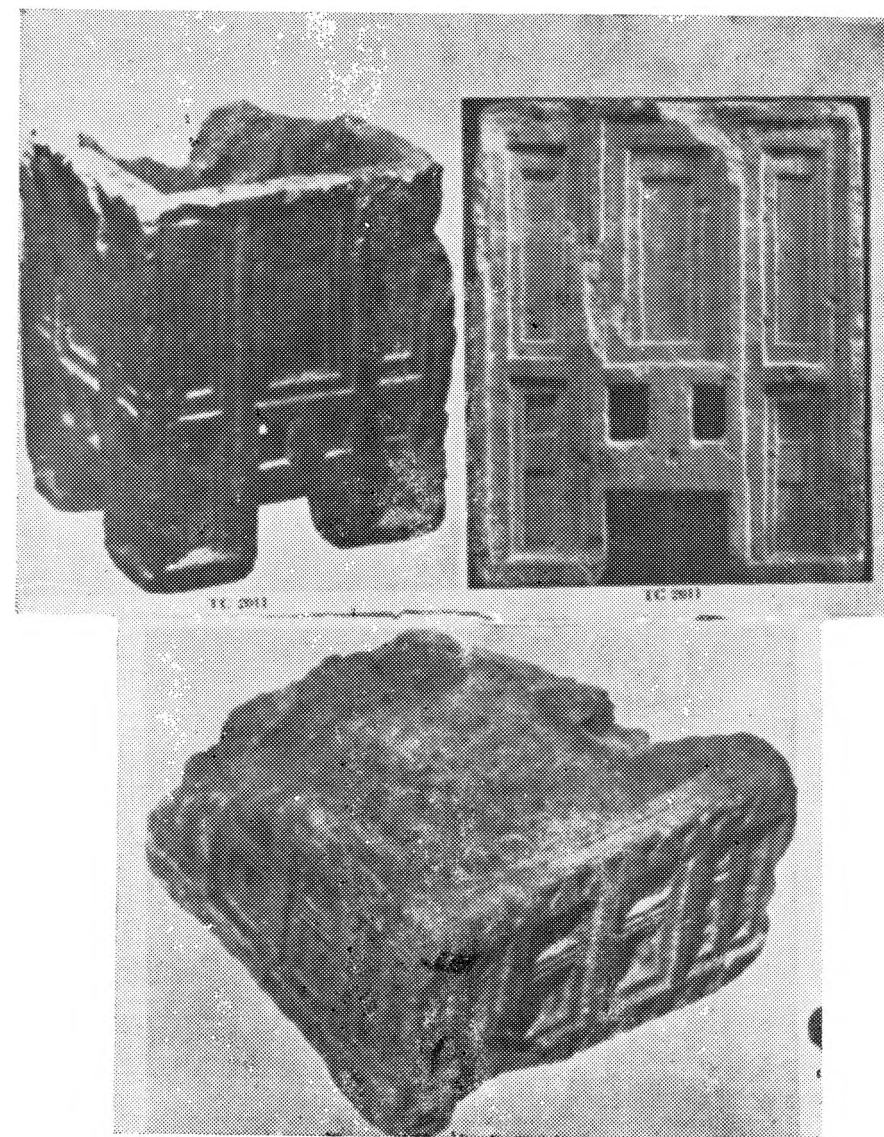


Pl. 4. Karnak Temple. Columns showing symbol of Upper Egypt, lily or lotus, at the right, and papyrus, symbol of Lower Egypt, at the left.

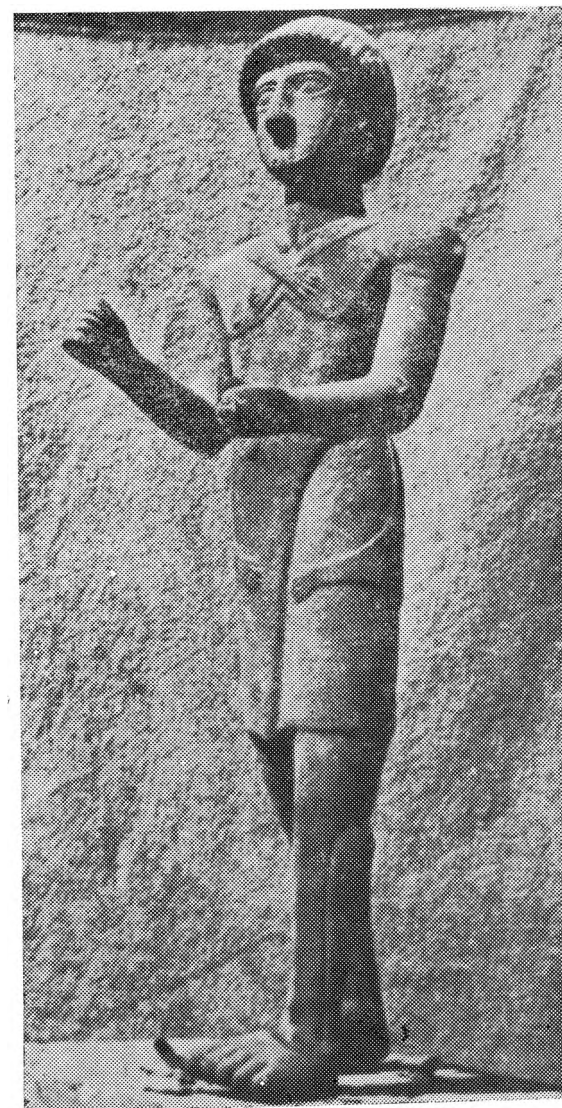


Pl. 5. Horusname of Uadji, on palace-façade, srkh name) sculptured on a funerary stela of lime-stone. Louvre.





Pl. 6. Censers adorned with palace-façade decorations.  
South Arabia.

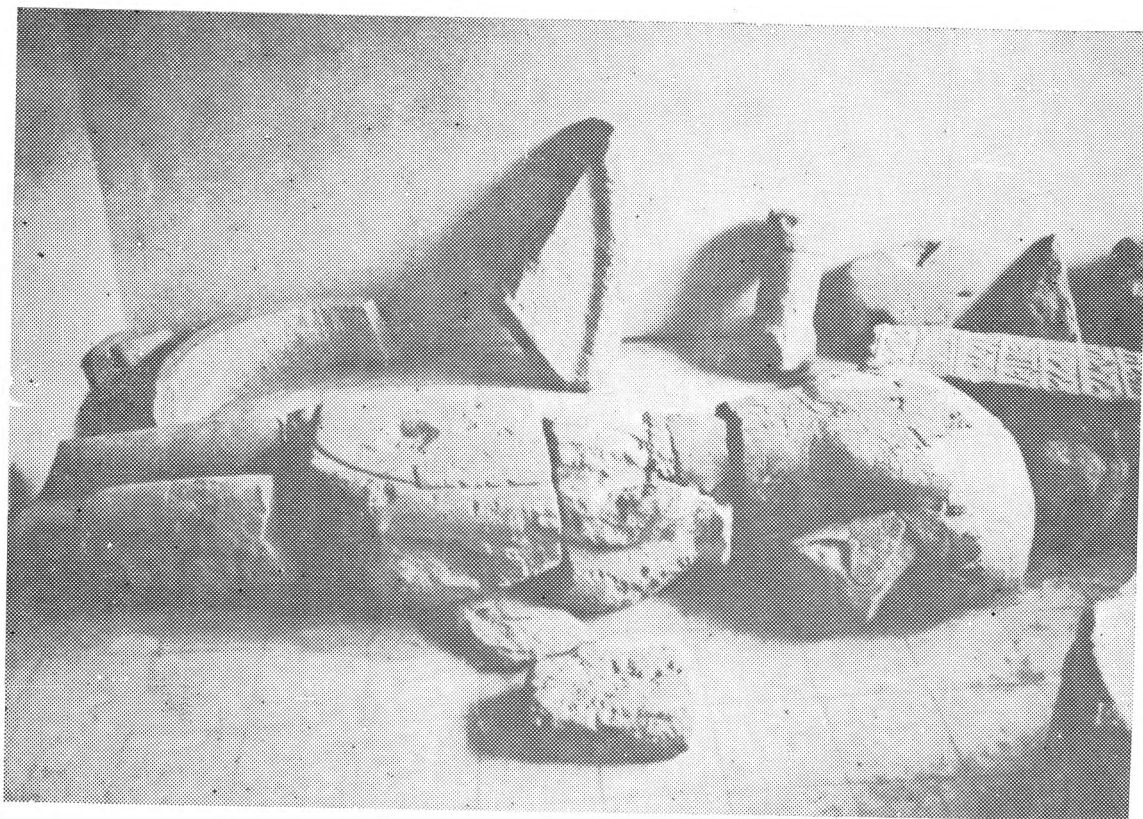


Pl. 7. Bronze Statue of Ma'ad Karib. 37 inches. Standing in a walking attitude with the left foot forward. He is shown wearing a lion or leopard skin on his back with forepaws across his chest and the tail hanging down behind. The leopard skin is emblem of Egyptian priesthood.



Pl. 8. A Statue of King Senusret I. Painted wood. Height 22 ins.  
Egyptian Museum - Early XIIth. Dynasty. Cairo — Egypt.





Pl. 9. Fragments of a limestone statue kept in the store-house of the municipality of Mada'n Salih. North Arabia.



Pl. 10. Fragment of a Statue. Stone. Taima Archaeological Sites.

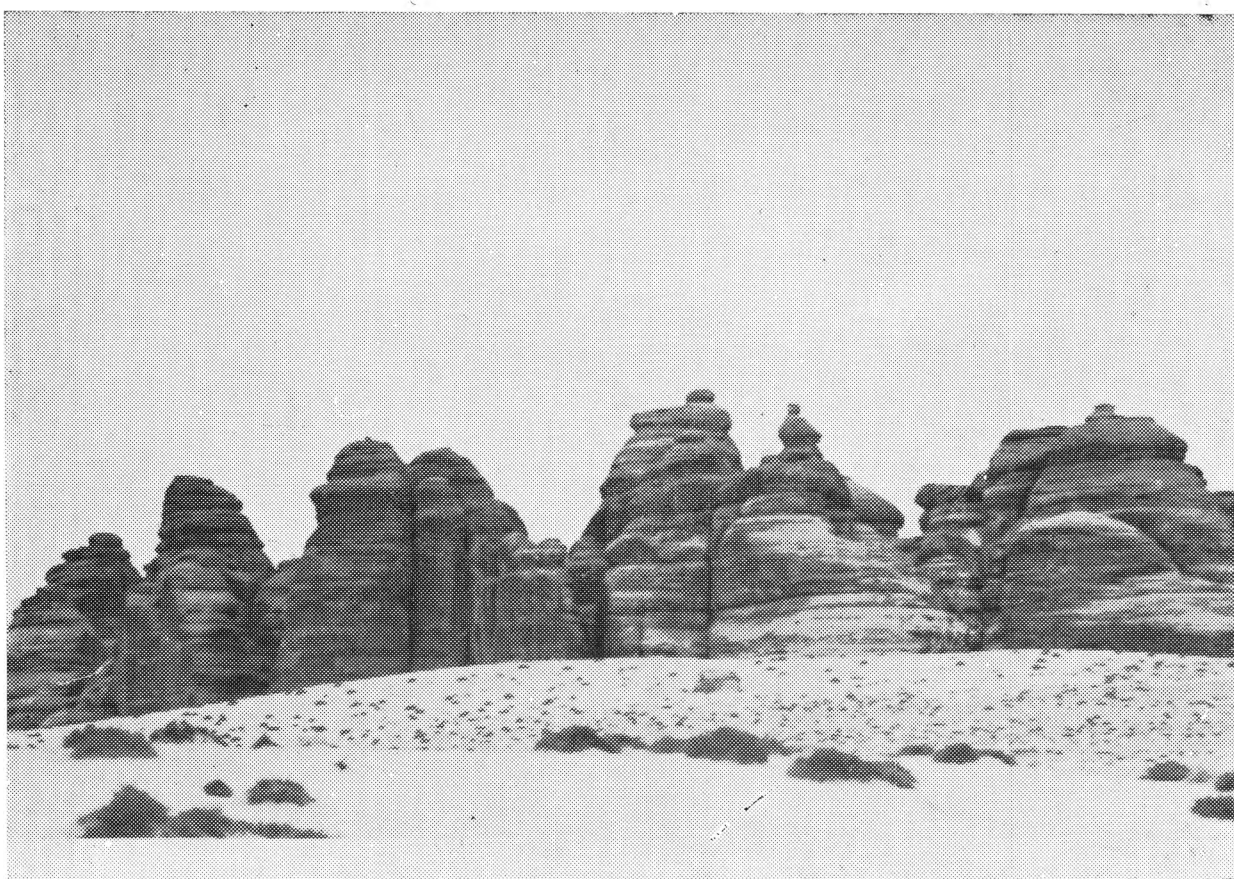


Pl. 11. Bronzehead found in 1931. British Museum.

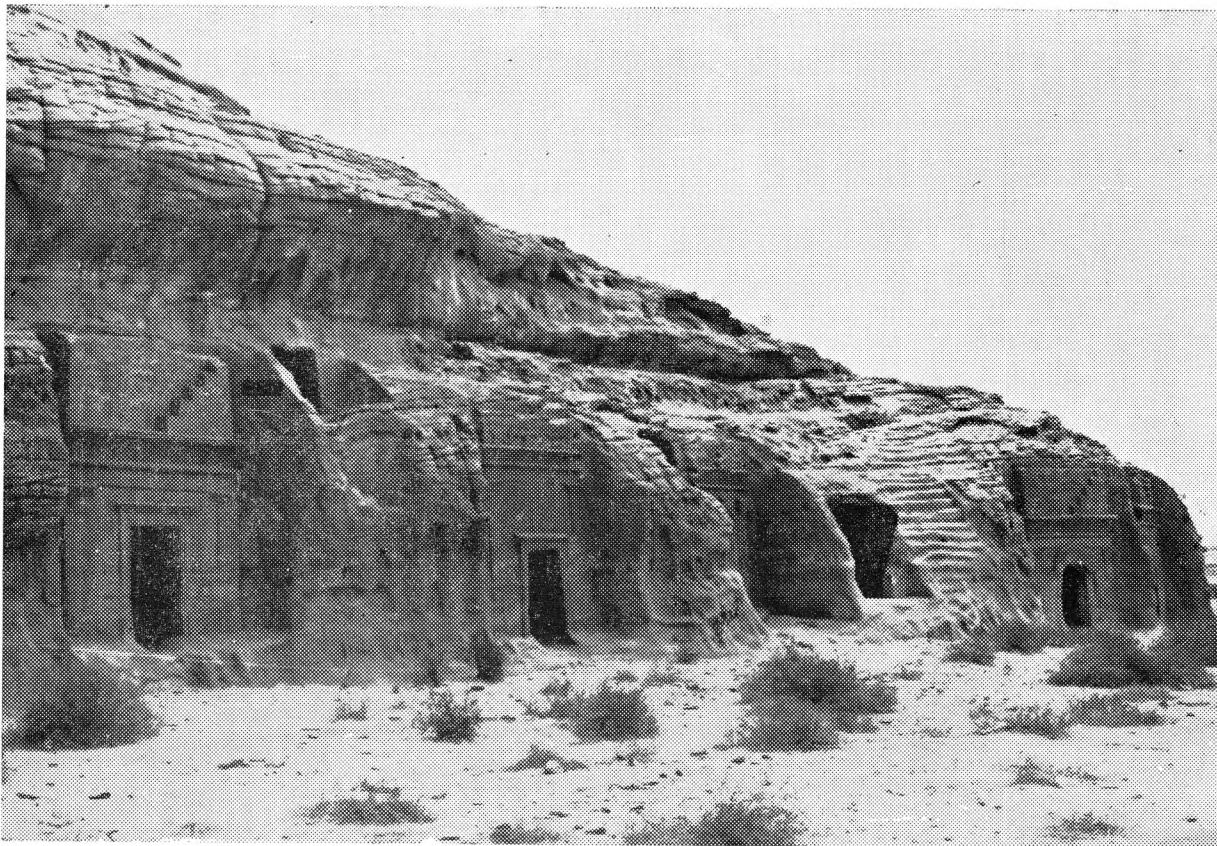




Pl. 12. The Lion-rider of Timna. Bronze. Alexandria School.

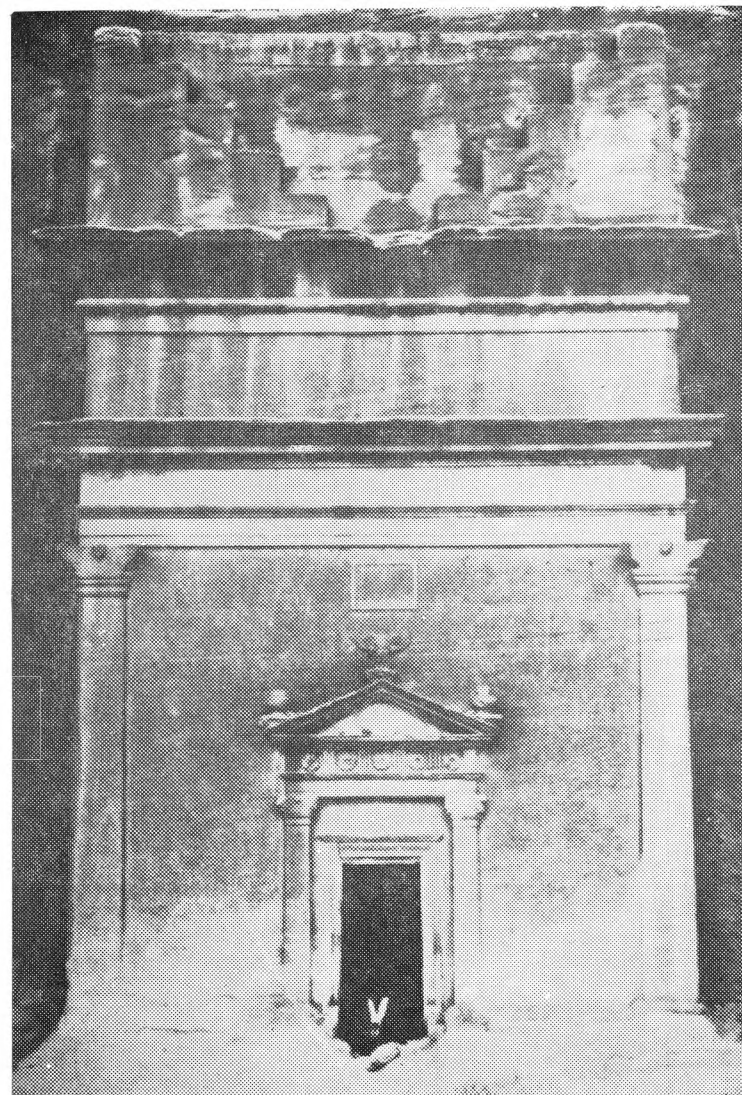


Pl. 13. a. Mada'in Salih Panorama.

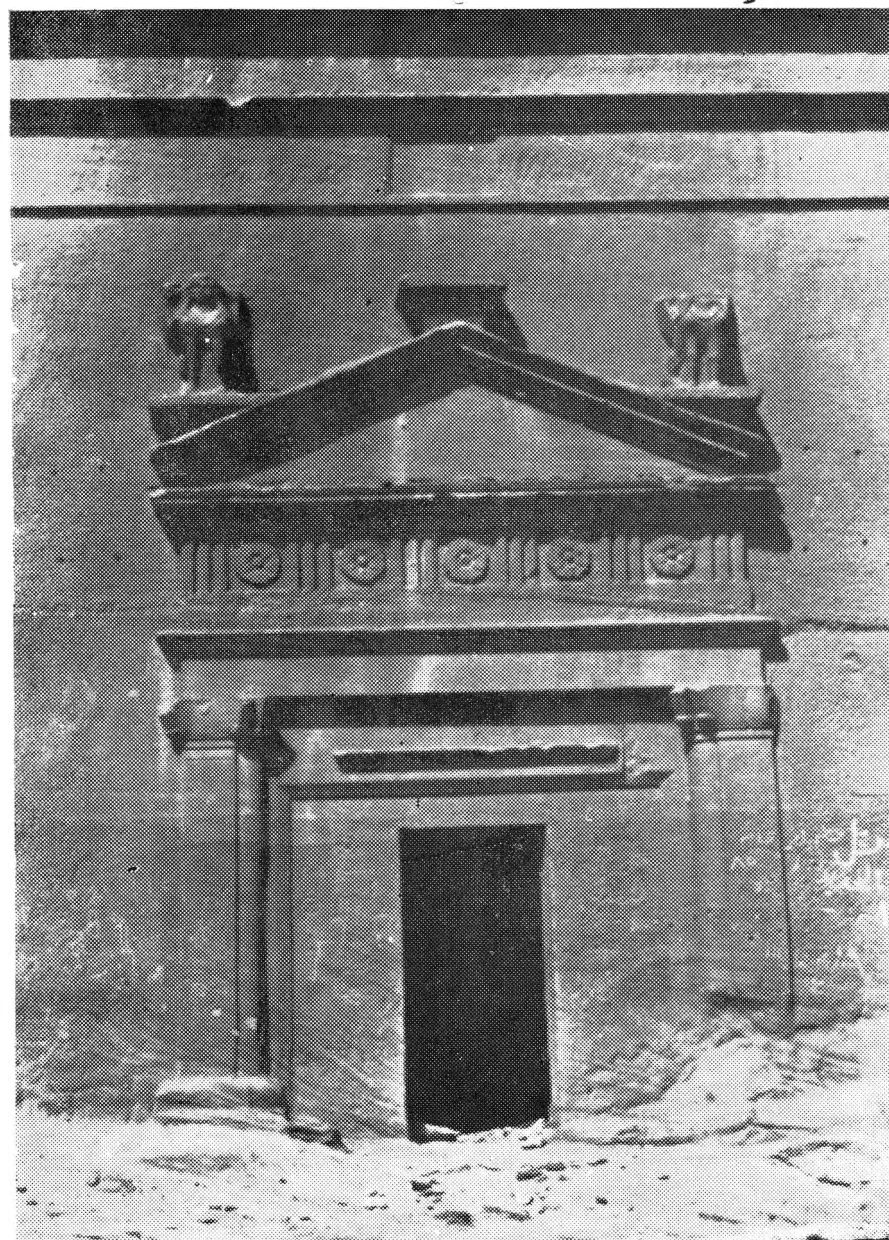


Pl. 13. b. The Tombs of Mada'in Salih. Hewn in the rock of the hills.

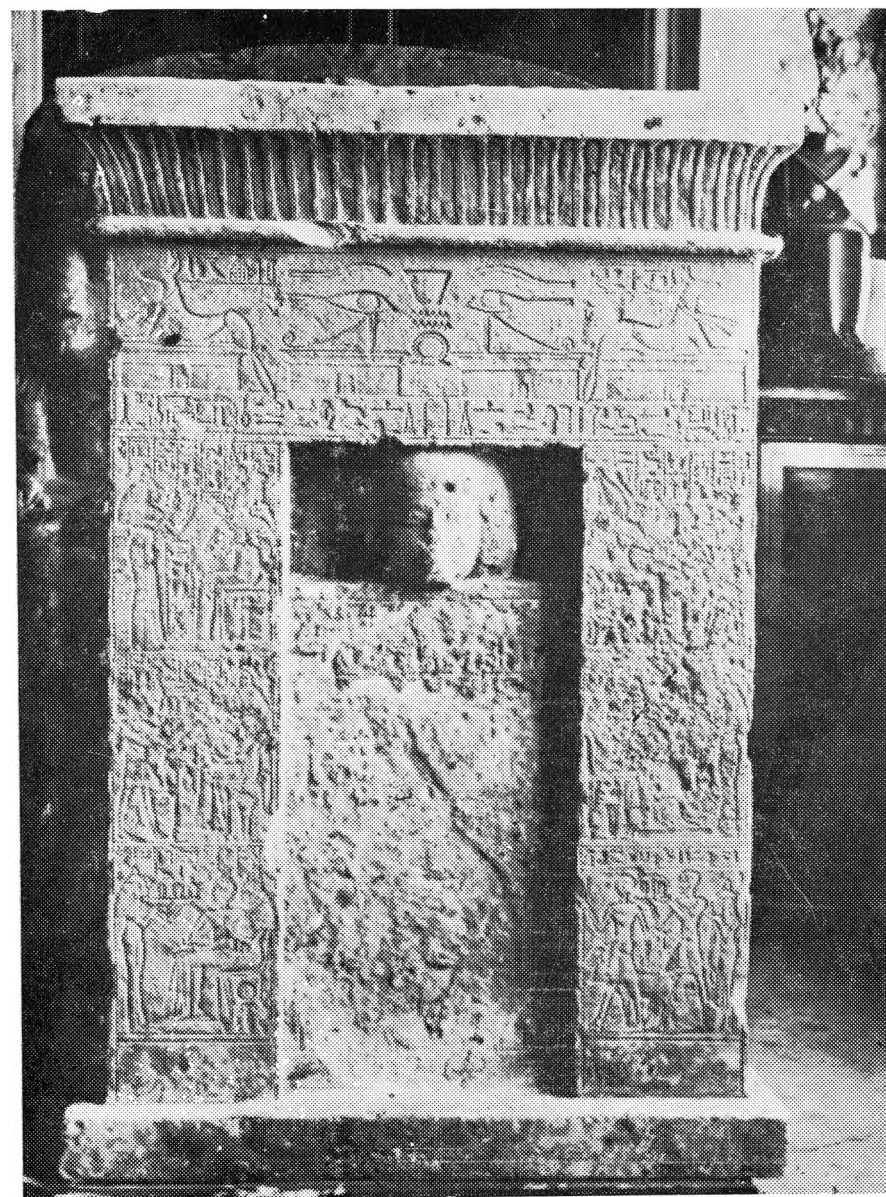




Pl. 14. a. A Tomb of Mada'in Salih. The Tomb-façade is adorned with the Egyptian cornice, under an inverted step-pyramid design, a distinctive feature of Nabatean tomb architecture.



Pl. 14 b. Mada'in Salih. Tomb — Façade decorated with Sphinxes and rosettes, emblems of sun-worship.

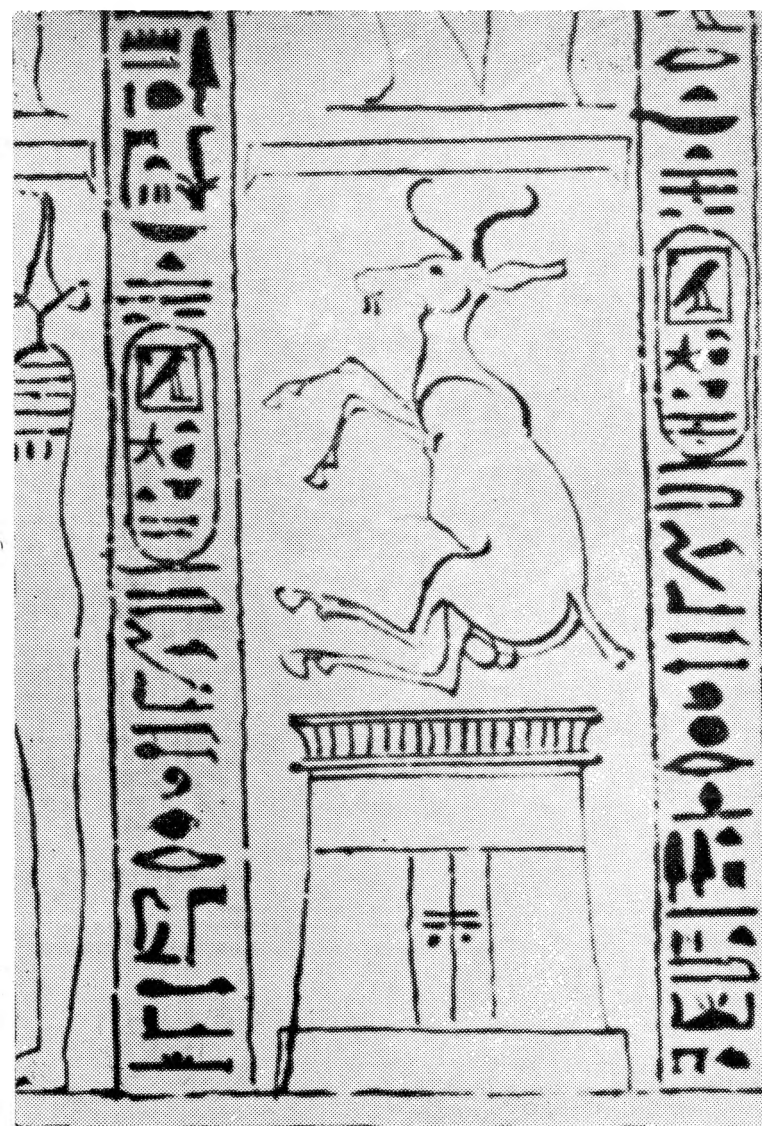


P1. 15. a. An Egyptian false-door Stela decorated with an Egyptian cornice.

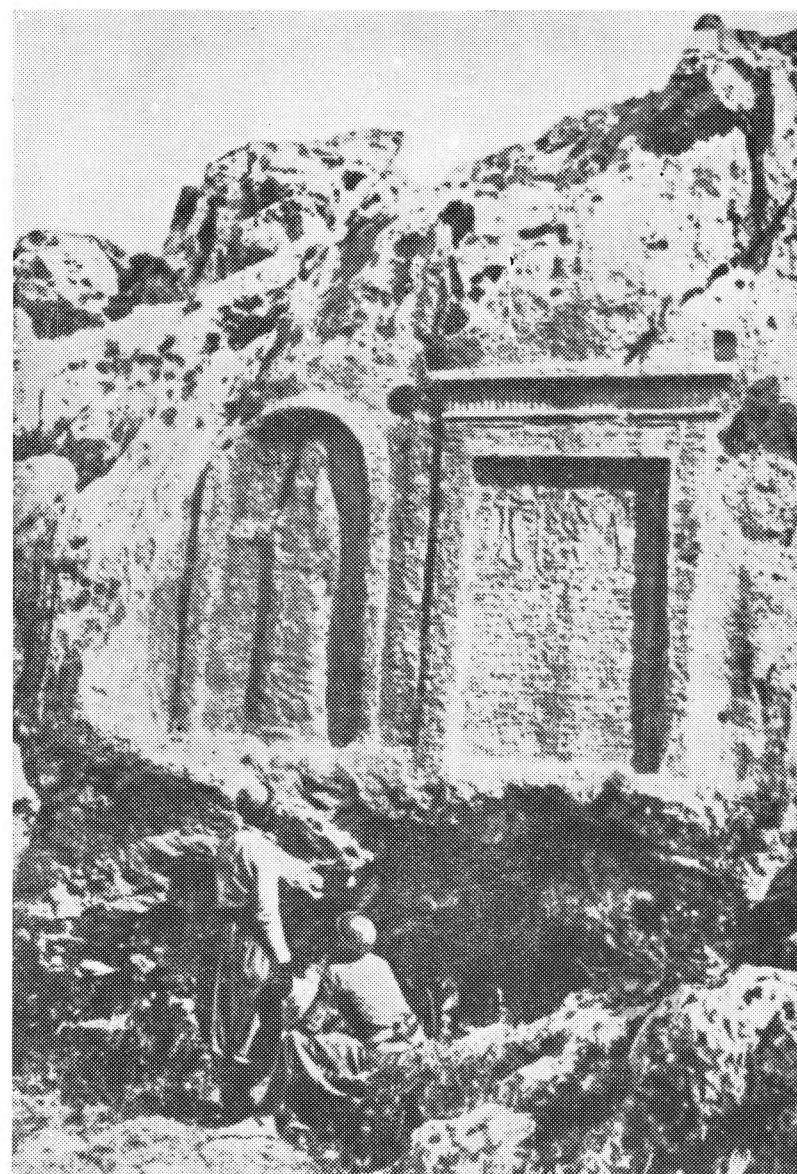




Pl. 15 b. The Great gate of The Temple of Hibis. Adorned with the Egyptian Cornice. Khargeh Oasis, Egypt.

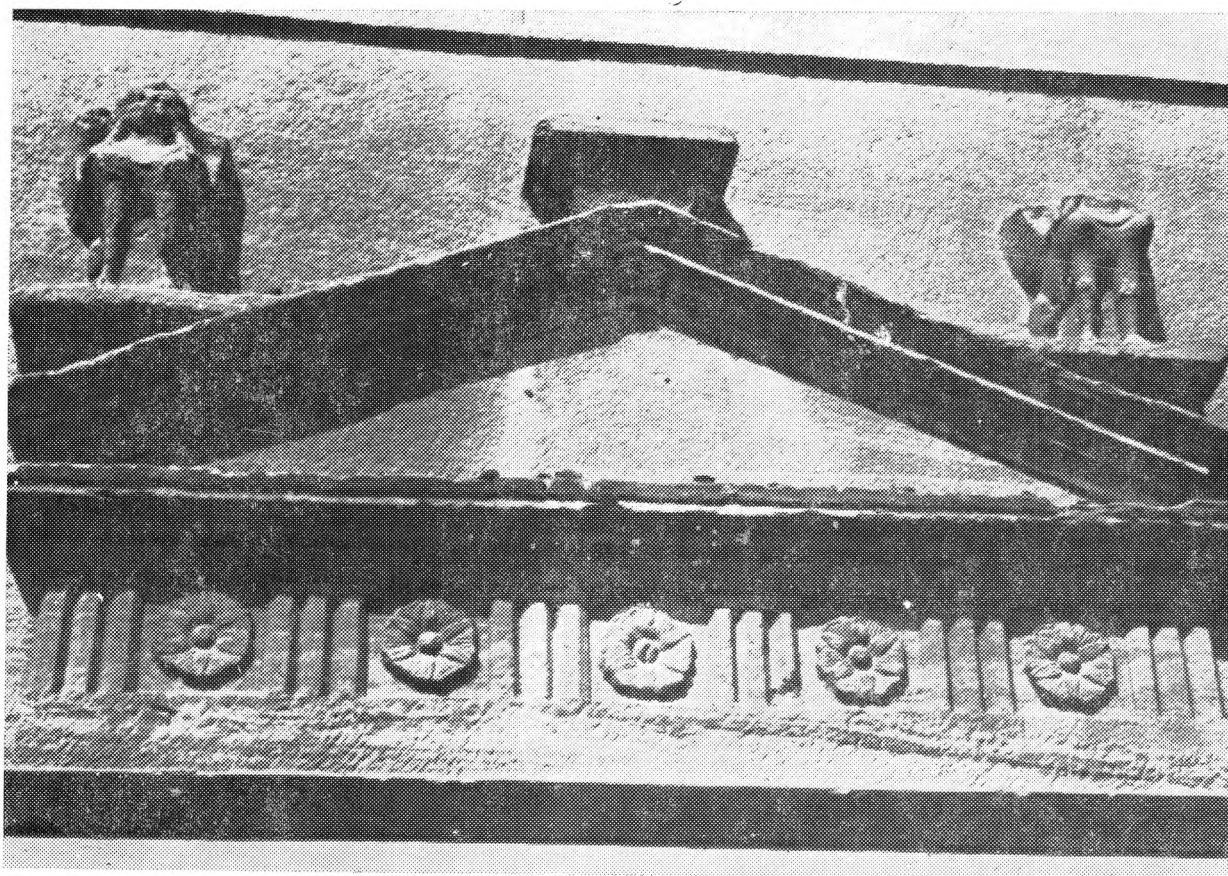


Pl. 16. A Tomb-gate; drawing on a papyrus. Egypt.

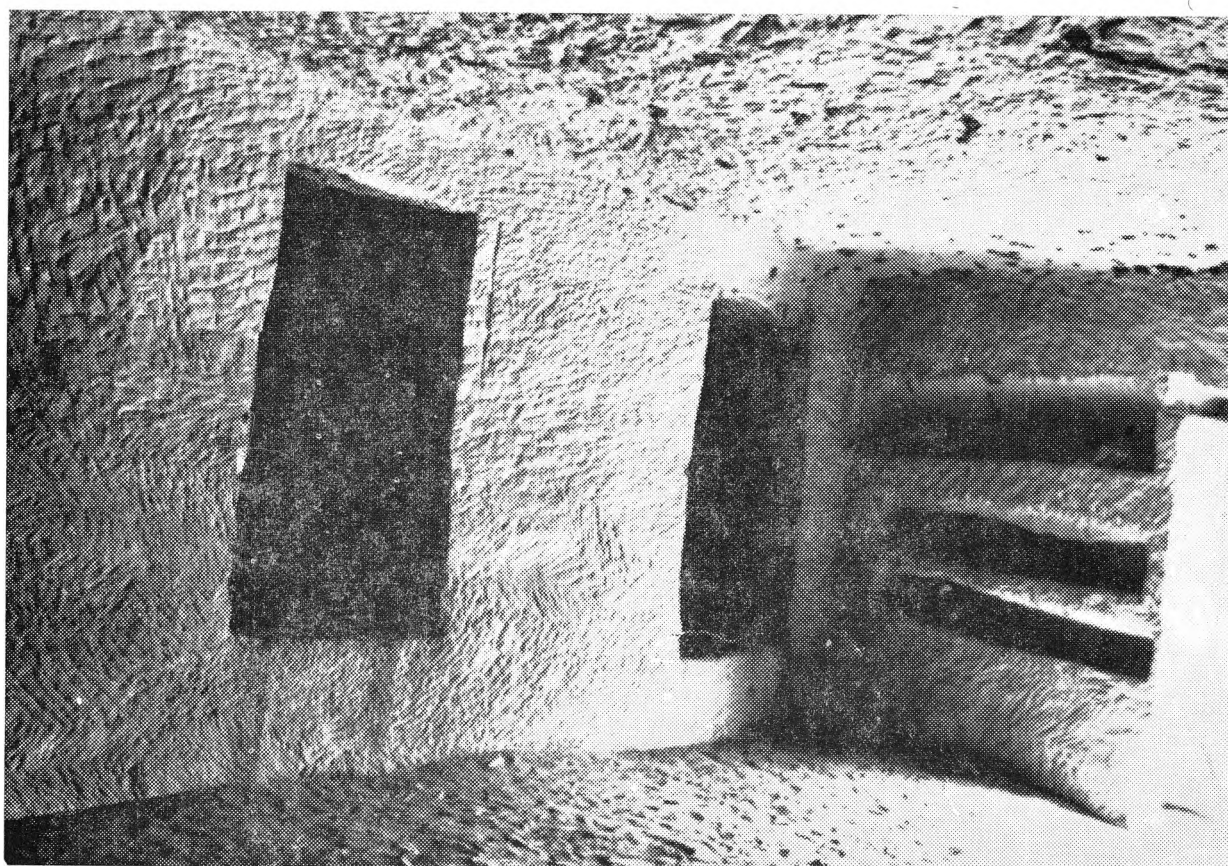


Pl. 17. A False-door stela hewn in the rock of a mountain. Syria.





Pl. 18. Rosettes and Sphinxes adorning a Nabatean tomb, symbols of  
Sungod, Egyptian, Syrian and Assyrian Influence.



Pl. 19. Mada'in Salih. The interior of a tomb, showing rectangular burial slots hollowed in the walls, or in the ground in the form of sarcophagus.

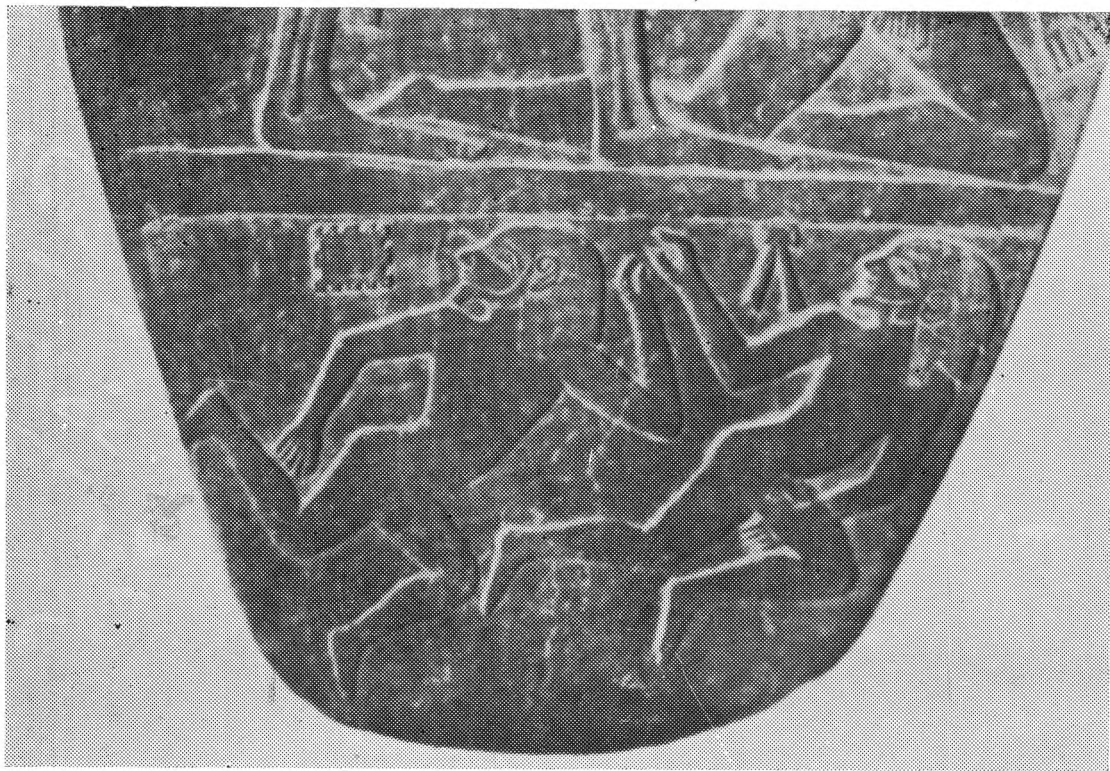


Pl. 20. Hierakonopolis. Egypt. The votive palette of King Narmer. Note the boat depicted above the beheaded men.





Pl. 21. Palette of King Narmer. A detail showing an enclosure of the Delta people. Note the wall with bastions.



Pl. 22. Palette of King Narmer. A detail showing the city-wall with bastions.

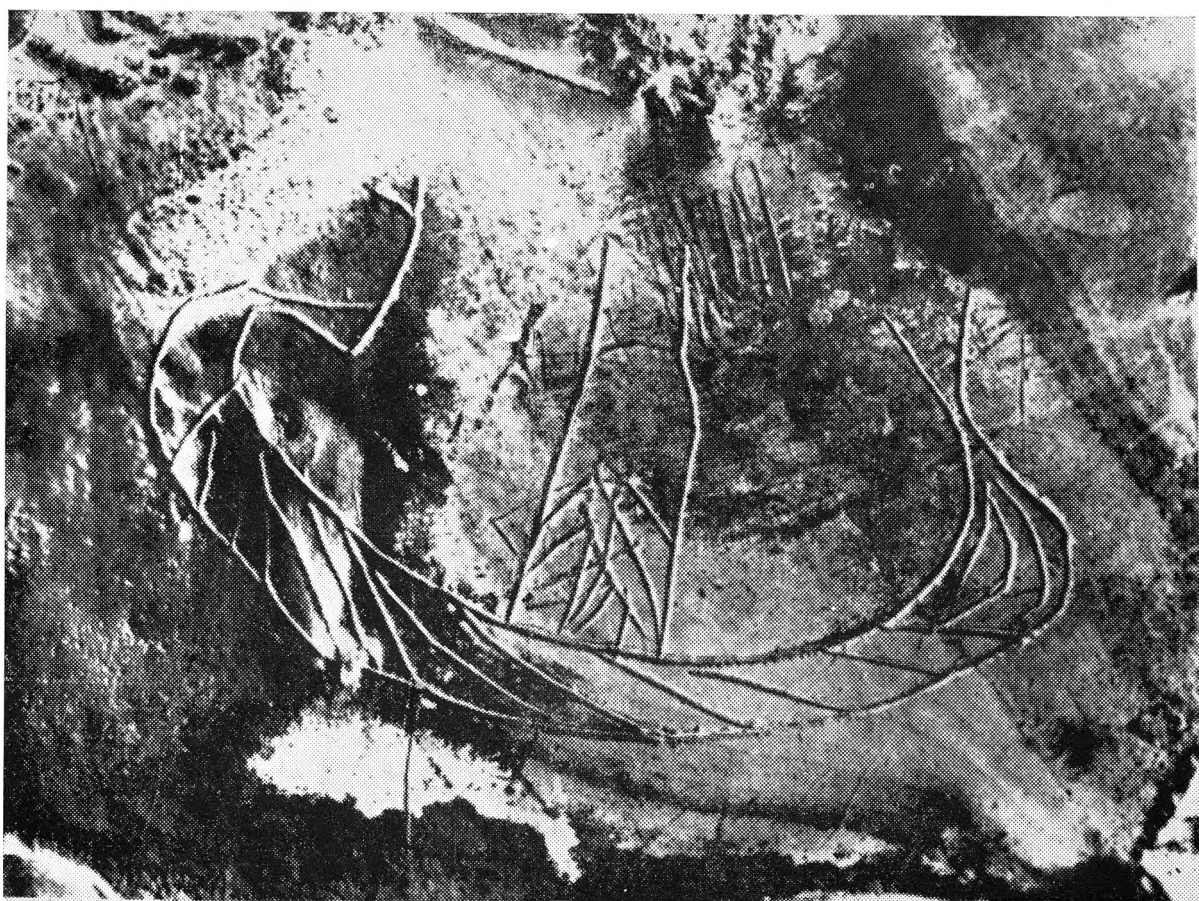


Pl. 23. Palette of the Libyans. Egyptian Museum. Cairo.  
Note the crenellated wall of the towns.





Pl. 24. Part of a mosaic pavement with a Nile Landscape. In The Temple of Fortuna, Praeneste. Italy.



P1. 25. Rock-drawing of a boat. Egyptian Deserts.

**TREATMENT OF SOME PIECES OF PARCHMENT AND PAPYRUS  
FOUND IN THE EXCAVATIONS OF THE SOCIETY OF EGYPTIAN  
ARCHAEOLOGY, LONDON, IN KASR IBRIM, NUBIA, 1972**

**By**

**ABDUL MOEIZ SHAHEEN**

The Subject of this work was intended to represent a guiding procedure for the conservation and restoration of Parchment and papyrus.

One of the reasons which may give this work a certain importance, is the fact that a great part of the tremendous amount of parchment and papyrus in our museums and national libraries needs conservation.

The cases dealt with in this work were chosen to represent most of the conservation and restoration works needed for this very important category of cultural heritage.

The selection of the conservation and restoration methods used in this work was based on the physical, chemical and biological characteristics of parchment and papyrus, also on the knowledge of ancient technology and preliminary experimental results.

Pieces of parchment treated were very hard, fragile, uneven and contain some crumbles. Moreover, their rims were bent over and parts of the text were hidden.

Good results for softening, flattening, removal of crumbles and strengthening of parchment were obtained, however, the change of colour due to the softening solutions was met by a limited success.

The papyrus dealt with in this work consisted of unknown number of layers stucked together with animal glue like a hardboard paper. It seems that it was used as a support for a leather cover of a papyrus codex.

Seperation of such a mass of papyrus was followed by cleaning, strengthening, treatment of the writings and protection against the attack of insects and microorganisms.

Hot water treatment affected goodseperation without damaging the text and inscriptions, which are written with carbon ink in Coptic language.

The pieces of parchment and papyrus treated were found in the excavations of the society of Egyptian Archaeology, London, in Kasr Ibrim, Nubia, 1972. All of them are now kept in the Coptic museum, Cairo.

The preliminary Investigations and procedure adopted for treatment :

Small pieces of parchment and papyrus found in the same excavations, but of no archaeological value, were used in the preliminary investigations.



## I. Parchment

All the pieces of parchment behaved almost in the same way towards some preliminary tests of which the following may be mentioned :

(1) On cleaning with dry soft brush and scalpel, the dirt on the surface were removed.

(2) On cleaning with soft brush wetted with ethyl alcohol 70%, the dirt inhabited in the pores were removed, but the writing were slightly damaged.

(3) On cleaning with soft brush wetted with ethyl alcohol 96%, the dirt inhabited in the pores were removed, without damaging the Writings.

(4) On spraying with lanoline emulsion, the parchment gained a limited softness.

No damage happened in the writings.

(5) On spraying with 10% alcoholic urea solution, the parchment gained a marked softness, but it was partially changed to a gelatine — like texture. The writings were slightly affected.

(6) On spraying with 5% alcoholic urea solution, the parchment gained enough softness without altering the texture. No damage was observed in the writings.

(7) On spraying with 3% Arabic gum solution, the parchment gained a very limited strength.

(8) On spraying with 3% gelatine solution, the parchment gained a very reasonable strength and malleability. A very slight change happened in the colour. No damage was observed in the writings.

## II. Papyrus

The following preliminary tests may be mentioned :

(1) On cleaning with dry soft brush and scalpel, the dirt on the surface were removed.

(2) On cleaning with soft brush wetted with ethyl alcohol 50%, the dirt inhabited in the pores were removed. No damage was observed in the writings.

(3) On exposing the mass of papyrus to water vapour in a tight box for one hour, the softness and flexibility of papyrus fibres increased to a great extent. The animal glue became very sticky and viscous, a case which did not enable the separation of papyrus layers.

(4) On soaking the mass of papyrus in hot water for 15 minutes, the animal glue dissolved and the papyrus layers started to separate. No damage in the writings was happened.

(5) On spraying with 5% polyvinylacetate solution, the strength of papyrus increased much, but its colour became very dark.

(6) On spraying with polyvinyl acetate emulsion (Vinavil) diluted with water by the ratio 1 : 8, the strength of papyrus increased, but its colour became dark to unacceptable extent.

(7) On spraying with 3% Arabic gum solution, the strength of papyrus increased much. The colour became slightly darker.

In accordance with the results of these tests and other preliminary investigations, the following procedure was, therefore adopted for the treatment.

## (A) Parchment

### I. Cleaning :

The superficial dirt were removed by a dry soft brush and scalpel. The dirt inhabited in the pores were then, removed by a soft brush wetted with 96% ethyl alcohol. The dirt, after being floated in the alcohol, were absorbed by a piece of cotton.

### II. Softening :

The process of softening was accomplished in the following steps :

(1) After removing the dirt, the parchment was treated with 96% ethyl alcohol in order to extract the water which may be present in the pores.

(2) After drying, the parchment was treated with a very small amount of glycerol.

(3) After one hour the parchment was sprayed with 5% alcoholic urea solution.

(4) After 24 hours, the parchment was polished by a soft dry brush, then a piece of soft dry cloth.

### III. Flattening and removal of crumbles :

The process of flattening and removal of crumbles was fulfilled in the following steps :

(1) The parchment was placed on glass plates and then sprayed with a little amount of 5% alcoholic urea solution.

(2) When the parchment became soft and flexible the flattening and removal of crumbles started by stretching the parchment around the uneven and crumbled places using the fingers, then by stretching the rims of the parchment.

(3) After removal of crumbles the parchment was sprayed with a very little amount of 5% alcoholic urea solution, then was put between paraffin papers and transferred to a manual press and left till dryness.

The paraffin papers were changed from time to time to avoid sticking of parchment to them.

#### IV Strengthening of parchment and treatment of writings :

After flattening and removal of crumbles the parchment was placed on glass plates and then, Sprayed with 3% gelatine solution to which few drops of formalin were added.

#### (B) Papyrus

##### I. Cleaning

The superficial dirt was removed by a dry soft brush and scalpel.

The dirt inhabited in the pores were then removed by a soft brush wetted with 50% ethyl alcohol. The dirt after being floated in the alcohol were absorbed by a piece of cotton.

##### II. Separation of the stucked papyrus sheets :

The separation of the stucked papyrus sheets was accomplished in the following steps :

(1) The mass of papyrus was put on a piece of cotton cloth, then immersed in a basin filled with hot water(60°).

(2) After dissolution of animal glue, the mass of papyrus was lifted by the use of the cotton cloth, then the separation of papyrus sheets was started by the use of the suitable kinds of forceps and scalpels.

The separated sheets of papyrus were kept in — between wetted plotting papers.

(3) The separated papyrus sheets were put on glass plates covered with dry plotting paper, then the flattening process started by the use of fingers, forceps and scalpels.

##### III. Strengthening of papyrus and treatment of the writings :

After flattening, the papyrus sheets were put on glass plates and sprayed with 3% Arabic gum solution, then they were put between paraffin papers and transferred to a manual press and left till dryness.

The paraffin papers were changed from time to time to avoid sticking of papyrus sheets to them.

#### Comparison between the pieces of parchment before and after treatment.

(1). Piece No. (A)

(See photos in Plates I & VII)

Number	Before treatment	After treatment	Remarks
Front face (A1)	Shape : almost round Maximum length : 6.7 cm. Maximum Width : 9.0 cm. : Number of Writing lines: 11 lines	Shape : almost rectangular Maximum length: 12.0 cm. Maximum width: 13.7 cm.) Number of writing lines: 14 lines	The colour became slightly darker
Back face (A2)	Shape : almost round Maximum length: 6.7 cm. Maximum width: 9.0 cm. Number of writing lines: 11 lines	Shape : almost rectangular Maximum length: 12.0 cm. Maximum width : 13.7 cm. Number of writing lines: 14 lines	

## (2) Piece No. (B+C)

(See photos in Plates II &amp; VIII)

Number	Before treatment	After treatment	Remarks
Front face of the upper sheet (B + C)	Shape : almost round Maximum length: 6.2 cm. Maximum width: 7.4 cm. Number of writing lines: 8 lines	Shape : irregular Maximum length: 11.6 cm. Maximum width: 10.2 cm. Number of writing lines: 14 lines	The Colour became slightly darker
Back face of the upper sheet	Shape : almost round Maximum length: 6.2 cm. Maximum width: 7.4 cm. Number of writing lines: unknown	Shape : irregular Maximum length: 11.6 cm. Maximum width: 10.2 cm. Number of writing lines: 14 lines	"
Front face of the lower sheet (B + C)	Shape : almost round Maximum length: 7.3 cm. Maximum width: 8.4 cm. Number of writing lines: 8 lines	Shape : irregular Maximum length: 10.8 cm. Maximum width: 10.3 cm. Number of writing lines: 15 lines	"
Back face of the lower sheet (C2)	Shape : almost round Maximum length: 7.3 cm. Maximum width: 8.4 cm. Number of writing lines: 9 lines	Shape : irregular Maximum length: 10.8 cm. Maximum width: 10.3 cm. Number of writing lines: 15 lines	"

## (3). Piece No. (D + E)

(See photos in Plates III &amp; IX)

Number	Before treatment	After treatment	Remarks
Front face of the upper sheet (D+E)	Shape : almost round Maximum length: 5.2 cm. Maximum width: 5.7 cm. Number of writing lines: 10 lines	Shape : irregular Maximum length: 8.4 cm. Maximum width: 9.7 cm. Number of writing lines: 13 lines	The colour became slightly darker
Back face of the upper sheet	Shape : almost round Maximum length: 5.2 cm. Maximum width: 5.7 cm. Number of writing lines: Unknown	Shape : irregular Maximum length: 8.4 cm. Maximum width: 9.7 cm. Number of writing lines: 13 lines	"
Front face of the lower sheet (D+E)	Shape : almost round Maximum length: 7.7 cm. Maximum width: 11.7 cm. Number of writing lines: 9 lines	Shape : almost rectangular Maximum: 15.4 cm. Maximum length: 13.9 cm. Number of writing lines: 11 lines	"
Back face of the lower sheet (E2)	Shape : almost round Maximum length: 7.7 cm. Maximum width: 11.7 cm. Number of writing lines: 9 lines	Shape : almost rectangular Maximum length: 11.2 cm. Maximum width: 13.7 cm. Number of writing lines: 11 lines	"



#### 4. Piece No. (F+G)

(See photos in Plates IV & X)

Number	Before treatment	After treatment	Remarks
Front face of the upper sheet (F+G)	Shape : almost round Maximum length: 7.4 cm. Maximum width: 7.1 cm. Number of writing lines: 8 lines	Shape : almost rectangular Maximum length: 12.4 cm. Maximum width: 12.6 cm. Number of writing lines: 11 lines	The colour became slightly darker
Back face of the upper sheet	Shape : almost round Maximum width: 7.1 cm. Maximum length: 7.4 cm. Number of writing lines : ?	Shape : almost rectangular Maximum width: 15.4 cm. Maximum length : 13.9 cm. Number of writing lines: 12 lines	"
Front face of the lower sheet (F+G)	Shape : almost round Maximum width: 12.4 cm. Maximum length: 8.6 cm. Number of writing lines: 9 lines	Shape : almost rectangular Maximum width: 15.4 cm. Maximum length : 13.9 cm. Number of writing lines : unknown	"
Back face of the lower sheet (G2)	Shape : almost round Maximum width: 12.4 cm. Maximum length: 8.6 cm. Number of writing lines: 10 lines	Shape: almost rectangular Maximum width : 15.4 cm. Maximum length 13.9 cm. Number of writing lines: 13 lines	"

#### 5. Piece No. (H)

(See photos in Plates V & XI)

Number	Before treatment	After treatment	Remarks
Front face of the upper sheet (H1)	Shape : almost round Maximum length: 8.6 cm. Maximum Width: 10.9 cm. Number of writing lines: 9 lines	Shape : irregular Maximum length : 10.7 cm. Maximcm Width: 10.9 cm. Number of writing lines : 10	The colour became slightly darker
Back face of the upper sheet	Shape : almost round Maximum length: 8.6 cm. Maximum width; 7.7 cm. Number of writing lines : 10.	Shape :irregular Maximum length 10.7 cm. Maxmum Width : 10.9 cm.: Number of writing lines: 10 lines	"
Back face of the lower sheet (H2)	Shape : almost round Maximum length: 8.6 cm. Maximum width: 7.7 cm. Number of writing lines: 7 lines	The shape and dimensions of this sheet can't be determined, as it is broken to many pieces of different shape and size.	"

The following sheets of parchment were separated from the interior of the piece No. (H).

(i) Two jointed sheets of parchment. On both sides of the two sheets 9 lines of a text in Coptic language are written. Maximum length is 10.2 cm. and maximum width is 19.6 cm. (see photos Plate XII).

(ii) Two sheets were originally joined together. On both sides of the two sheets 9 lines of a text in Coptic language are written. Maximum length is 11.4 cm. and maximum width is 15.2 cm. (see photos Plate XIII).

(iii) Some sheets of different sizes (see photos Plate XIV).

#### LIST OF THE SHEETS SEPARATED FROM THE PAPYRUS MASS No. (P)

Fourty four sheets of different sizes were separated from the papyrus mass No. P; which was consisting of unknown number of layers stucked together with animal glue like hardboard paper.

The fourty four sheets were arranged in seven groups depending upon the characteristics of papyrus fibres, the palaeographical characters and on the sequence of separation process.

The seven groups are listed below according to the order of separation.

#### FIRST GROUP (SEE PHOTOS IN PLATE XV).

This group consists of six sheets of papyrus as follows:

(1) A sheet carrying on the front side a text written with carbon ink in Coptic language consisting of seven lines. On the back side it carries a text consisting of one line in Coptic language too. Mean length is 10.7 cm, and mean width is 10.0 cm.

(2) A sheet carrying on the front side a faint traces of a text written with carbon ink in Coptic language. The text consisting of remains of three lines. On the back side it carries faint traces of a text consists of one line and is written with carbon ink in Coptic language too. Length is 5.5 cm. and mean width is 10.0 cm.

(3) A sheet carrying on the front face faint traces of a text written with carbon ink in Coptic language. The text is consisting of three lines. The back face is free from writings. Length is 5.0 cm. and width is 9.0 cm.

(4) A sheet carrying on the front face very faint traces of a text consisting of one line. The text is written with carbon ink in Coptic language. The back side is free from writings. Length is 3.5 cm. and width is 10.0 cm.

(5) A sheet free from writings on both sides. Length is 2.5 cm. and width is 2.0 cm.

(6) A sheet free from writings on both sides. Length is 5.0 cm. and width is 1.5 cm.

#### SECOND GROUP (SEE PHOTO PLATE XVI)

This group consists of six sheets of papyrus as follows:

(1) A sheet carrying on the front face a text consisting of six lines. The text is written with carbon ink in Coptic language. The back side is carrying a text consisting of five lines in Coptic language too. Length is 5.0 cm. and width is 9.5 cm.

(2) A sheet carrying on the front face a text consisting of five lines. The text is written with carbon ink in Coptic language. The back face is carrying a text consisting of five lines in Coptic language too. Length is 5.0 cm. and width is 10.2 cm.

(3) A sheet carrying on the front face very faint traces of a text consisting of remains of three lines. The text is written with carbon ink in Coptic language. The back side is carrying faint traces of a text consisting of remains of five lines written in Coptic language too. Length is 8.0 cm. and width is 9.0 cm.

(4) A sheet carrying on the front face faint traces of a text consisting of remains of three lines. The text is written with carbon ink in Coptic language. The back side is carrying faint traces of a text consisting of remains of three lines written in Coptic language too. Length is 7.0 cm. and width is 3.0 cm.

(5) A sheet free from writings on the front face. On the back face it carries faint traces of Coptic text consisting of remains of three lines. Length is 2.5 cm. and width is 3.5 cm.

(6) A sheet free from writings on both sides. Length is 2.0 cm. and width is 1.5 cm.

#### THIRD GROUP (SEE PHOTOS IN PLATE XVII)

This group consists of five sheets of papyrus. All of them carry on the front face a text written with carbon ink in Coptic language. The back face of all the sheets is free from writings. It seems from the palaeographical characters that all of them can be collected together in one big sheet of dimensions: Length 20.0 cm. and width 8.0 cm.

#### FOURTH GROUP (SEE PHOTOS PLATE XVIII)

This group consists of four relatively large irregular sheets and three small sheets. All of them carry on both sides some words in Coptic language:

(1) A sheet carrying on both sides faint traces of some words written in Coptic language with carbon ink. Length is 14.0 cm. and width is 3.5 cm.

(2) A sheet carrying on the front face faint traces of some words written with carbon ink in Coptic language. The back side is free from writings. Length is 9.5 cm. and width is 3.5 cm.

(3) A sheet carrying on the front face faint traces of a text written with carbon ink in Coptic language. The back side is free from writings. Length is 11.2 cm. and width is 5.5 cm.

(4) A sheet carrying on both sides faint traces of a text written in Coptic language with carbon ink. Length is 6.8 cm. and width is 5.0 cm.

#### FIFTH GROUP (PHOTOS PLATE XIX).

This group consists of three sheets as follows :

(1) A sheet carrying on the front side a drawing representing a bird. The back side is free from writings. Length is 15.5 cm. and width is 9.5 cm.

(2) A sheet free from writings on both sides. Length is 9.0 cm. and width is 6.5 cm.

(3) A sheet carrying on the front side some words written with carbon ink in Coptic language. The back side carries faint traces of some words written in Coptic language too. Length is 10.0 cm. and width is 5.0 cm.

#### SIXTH GROUP (PHOTOS PLATE XX)

This group consists of relatively large sheet of papyrus, almost rectangular in shape and has irregular rims. The sheet carries on the front face a geometrical pattern drawn in carbon ink. On the back face it carries faint traces of a text written in Coptic language. Length is 15.0 cm. and width is 12.5 cm.

In addition there are 8 very small pieces, some of them carry faint traces of some words written in Coptic language with carbon ink.

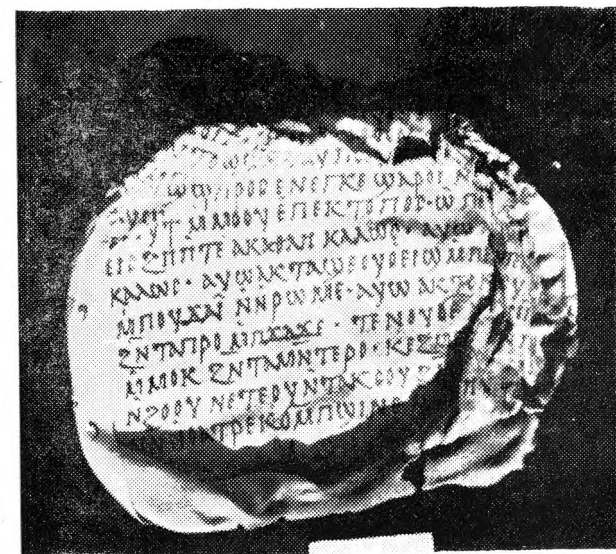
#### SEVENTH GROUP (PHOTOS PLATE XXI)

This group consists of relatively large sheet of papyrus, almost rectangular in shape and irregular in one side. The sheet carries on the front face faint traces of a text written with carbon ink in Coptic language. On the back face it carries one line of a text written with carbon ink in Coptic language. Length is 10.2 cm. and width is 10.5 cm.

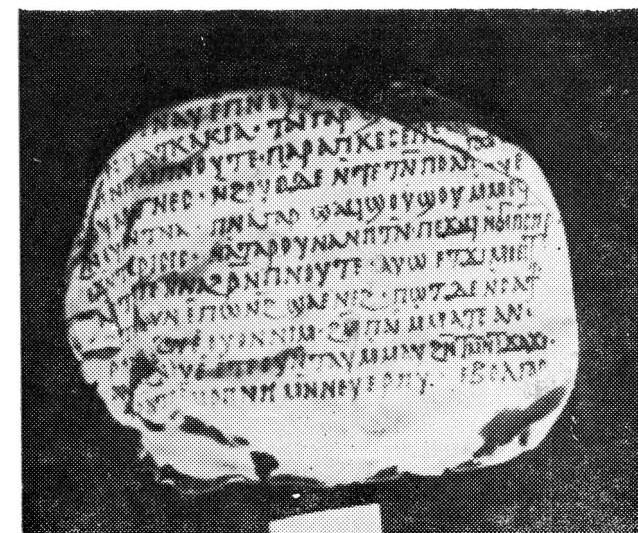
In addition there are seven very small pieces, some of them carry some Coptic letters.

A. MOEIZ SHAHEEN

(A) Photos representing the pieces of Parchment and papyrus before treatment.



Front face of Parchment piece No. (A)

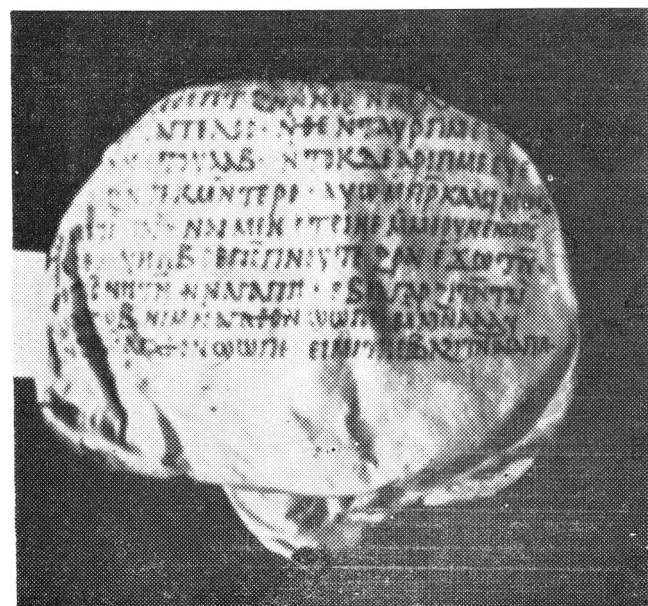


Back face of parchment piece No. (A)

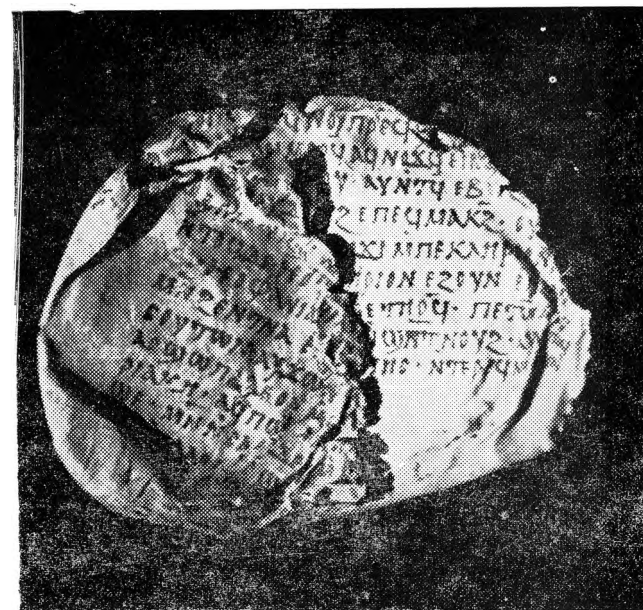




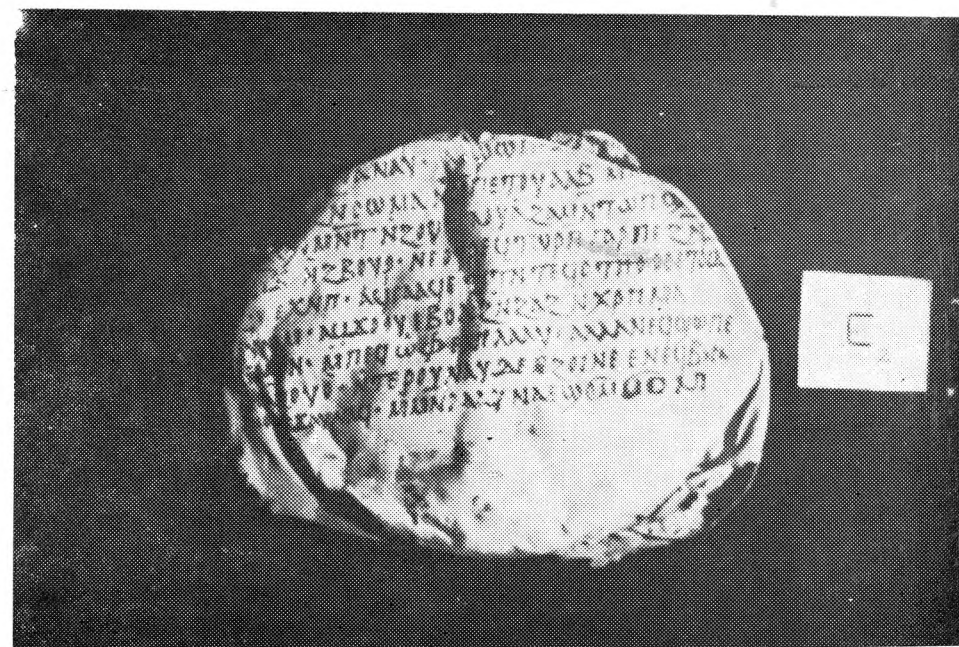
Front face of parchment piece No. (B+C).



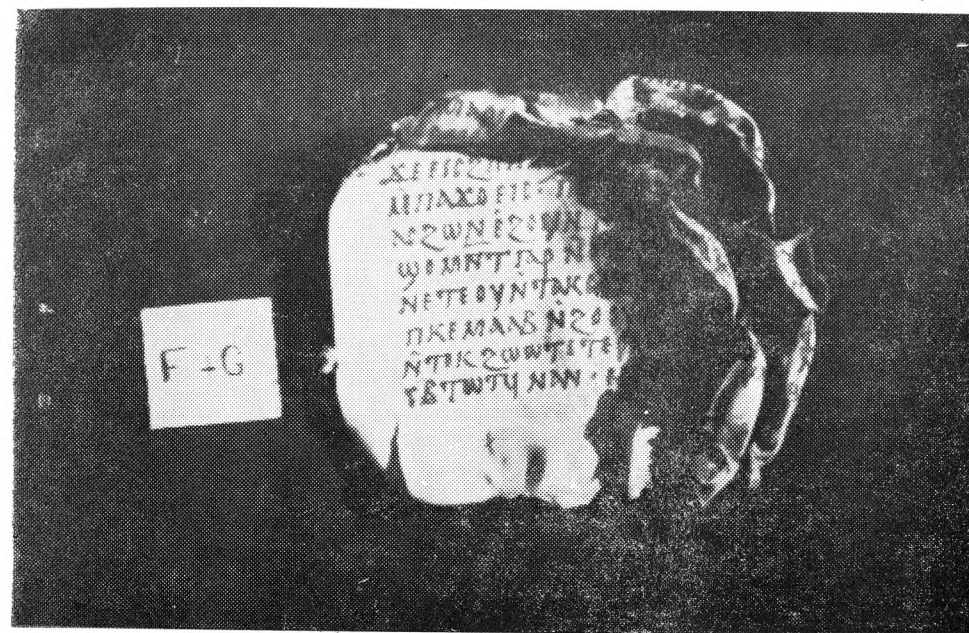
Back face of parchment piece No. (C).



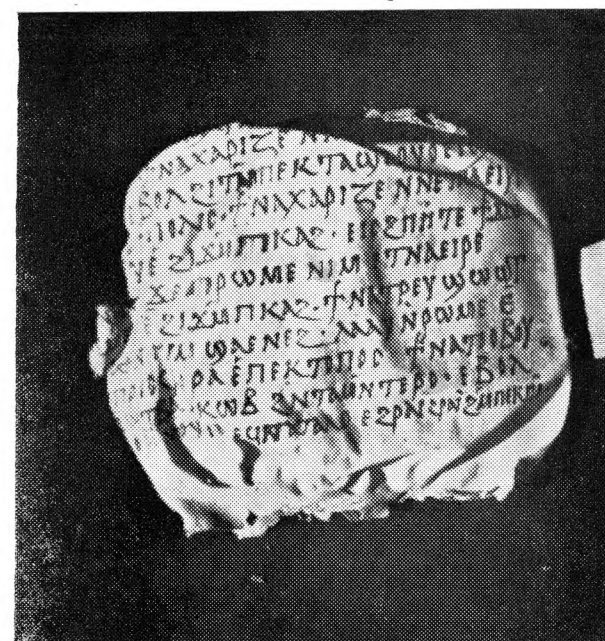
Front face of parchment piece No. (D+E).



Back face of parchment piece No. (E)

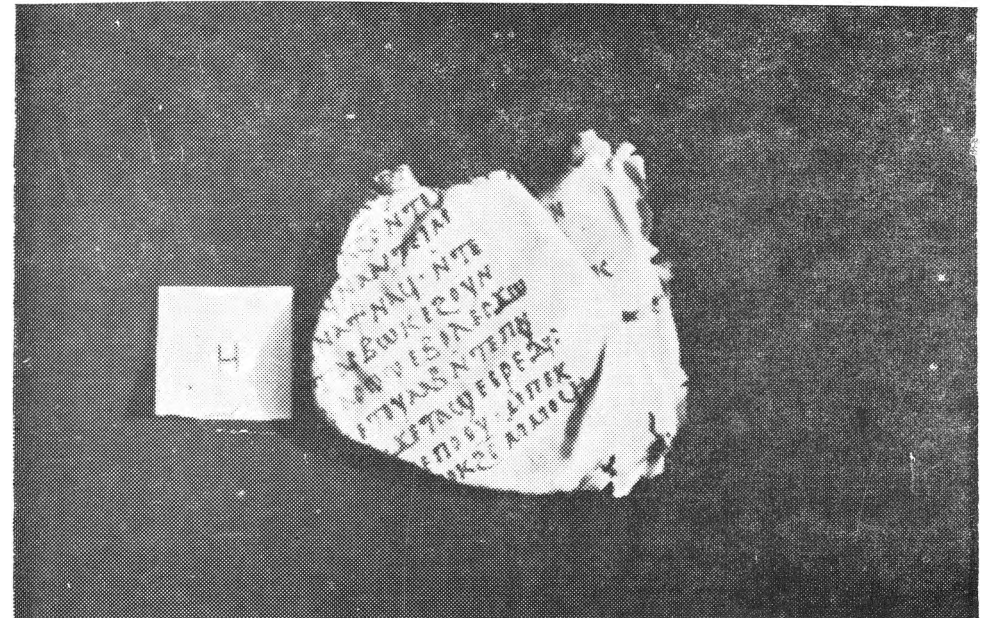


Front face of parchment piece No. (F).

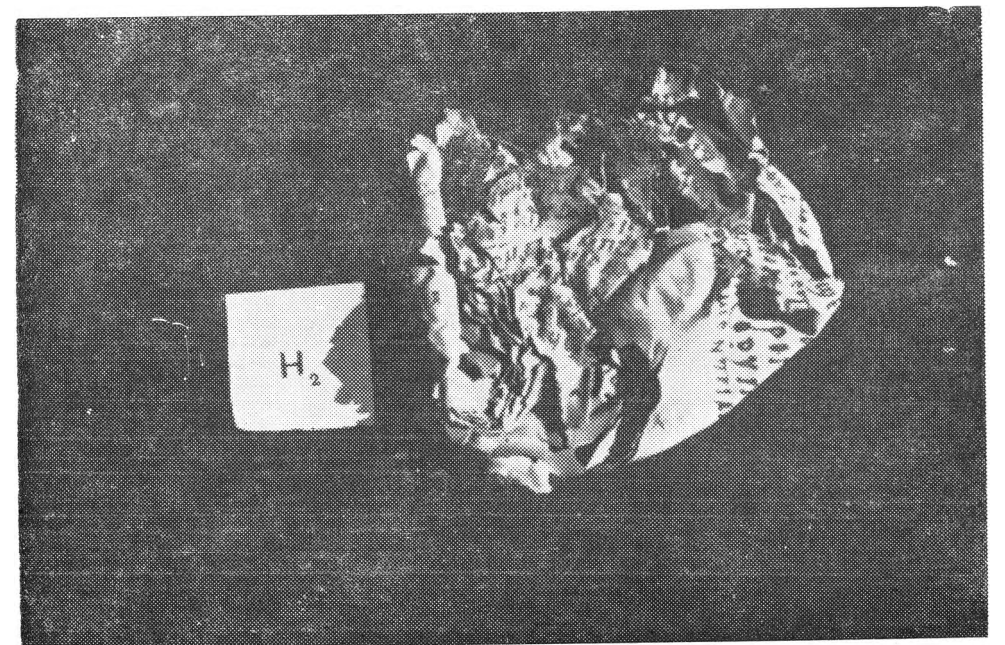


Back face of parchment piece No. (G).

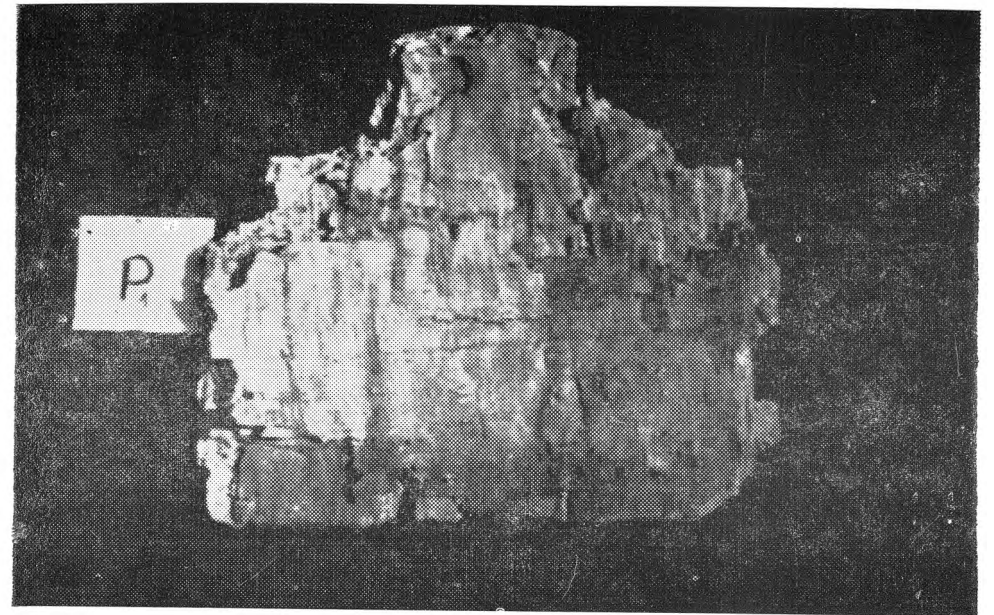




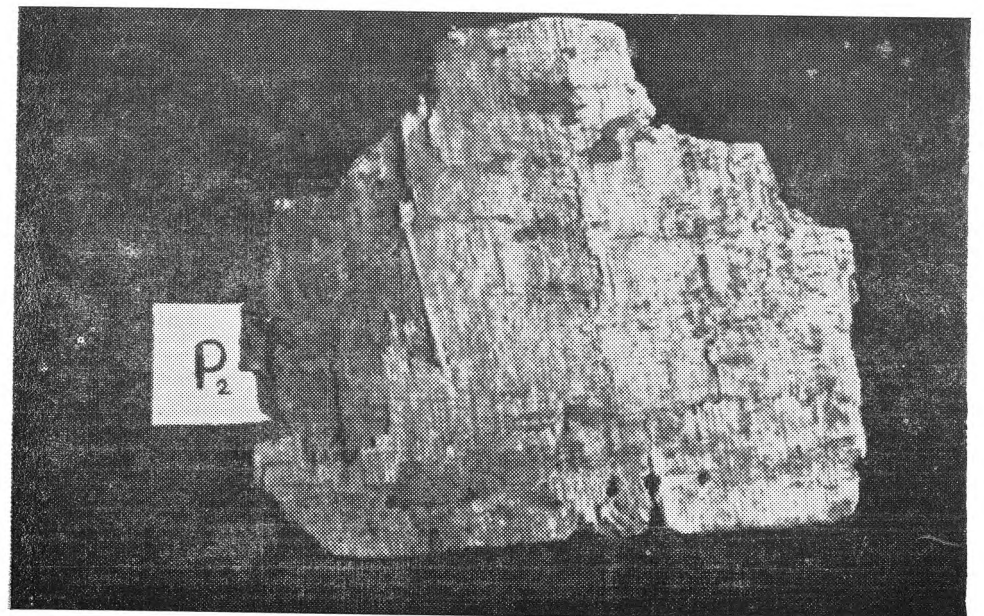
Front face of parchment piece No. (H).



Back face of parchment piece No. (H).

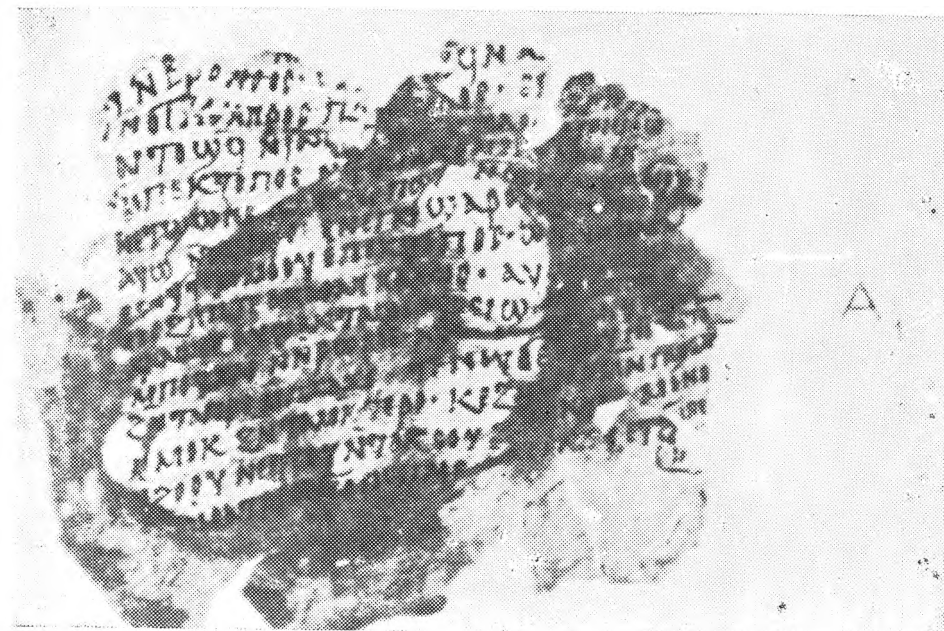


Front face of papyrus mass No. (P).

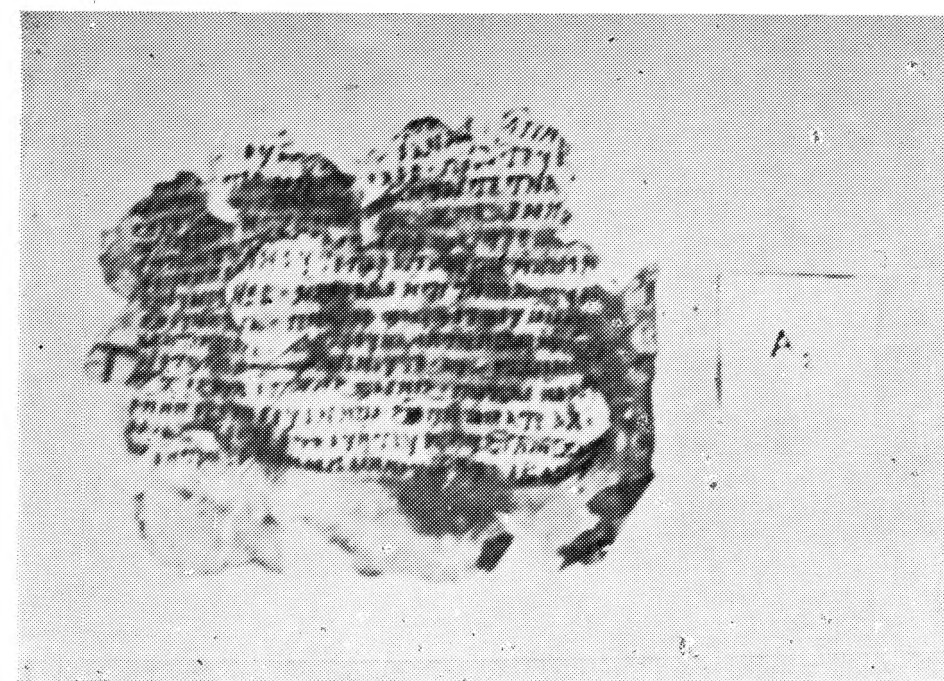


Back face of papyrus mass No. (P).

(B) Photos representing the pieces of parchment and papyrus after treatment.

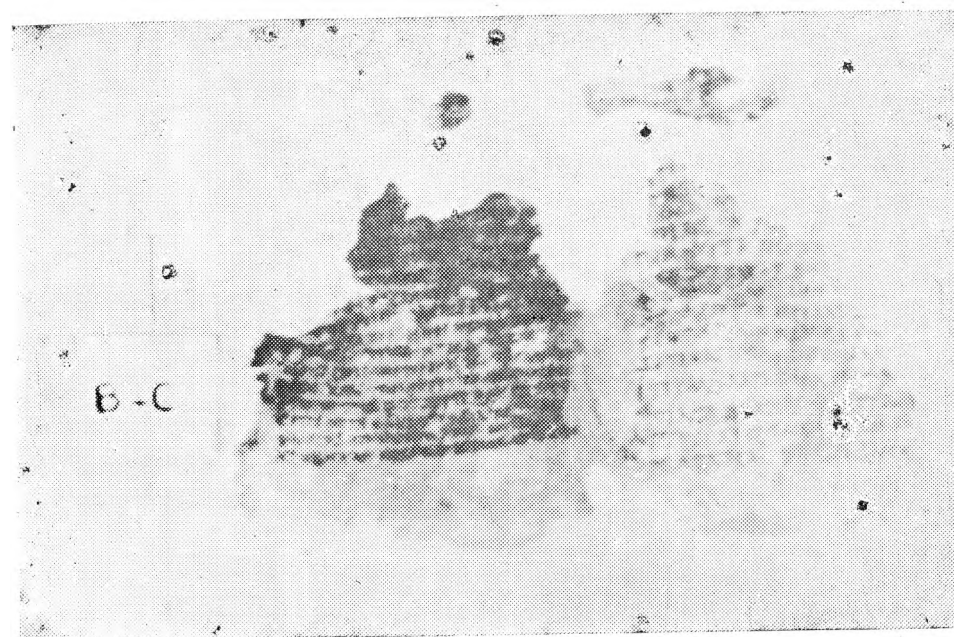


Front face of parchment piece No. (A).

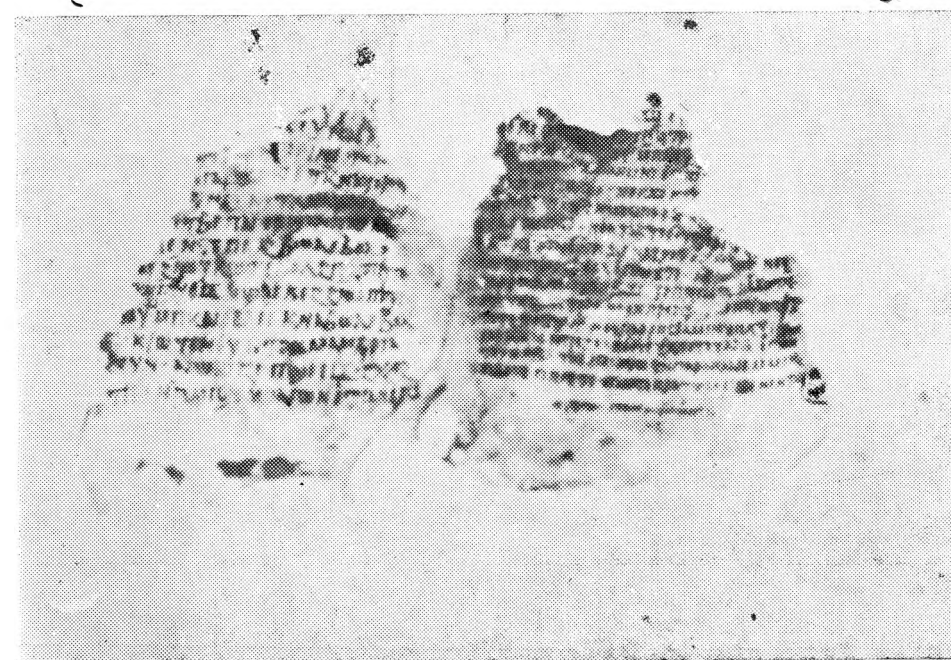


Back face of parchment piece No. (A).





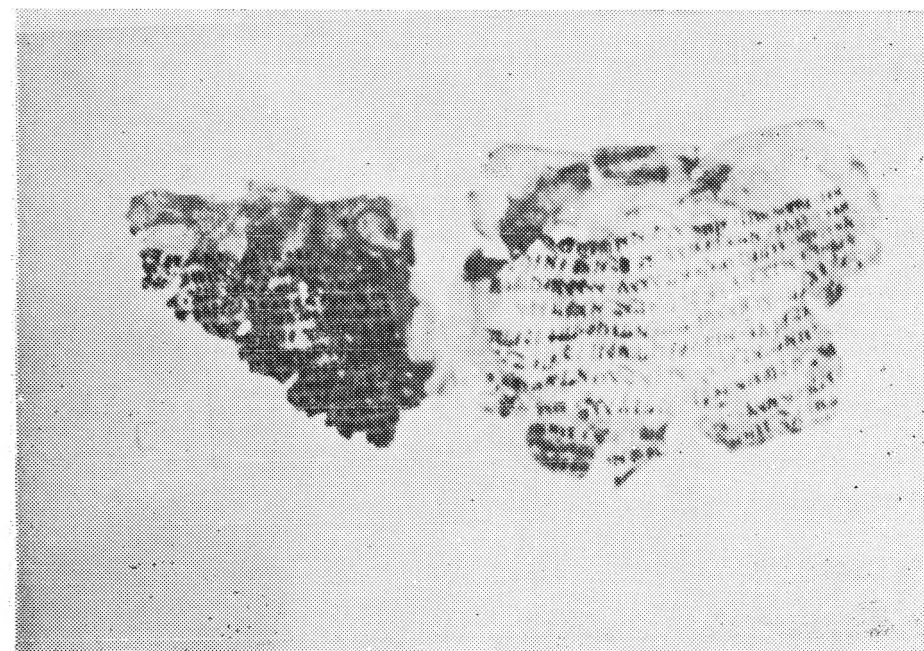
Front face of the two pieces of parchment No. (B+C).



Back face of the two pieces of parchment No. (B+C).



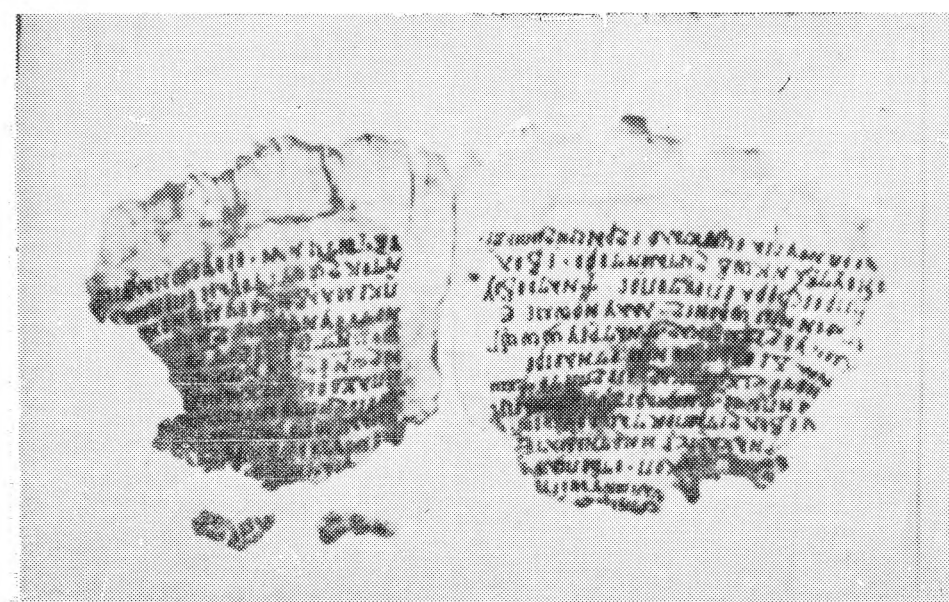
Front face of the two pieces of parchment No. (D+E).



Back face of the two pieces of parchment No. (D+E).

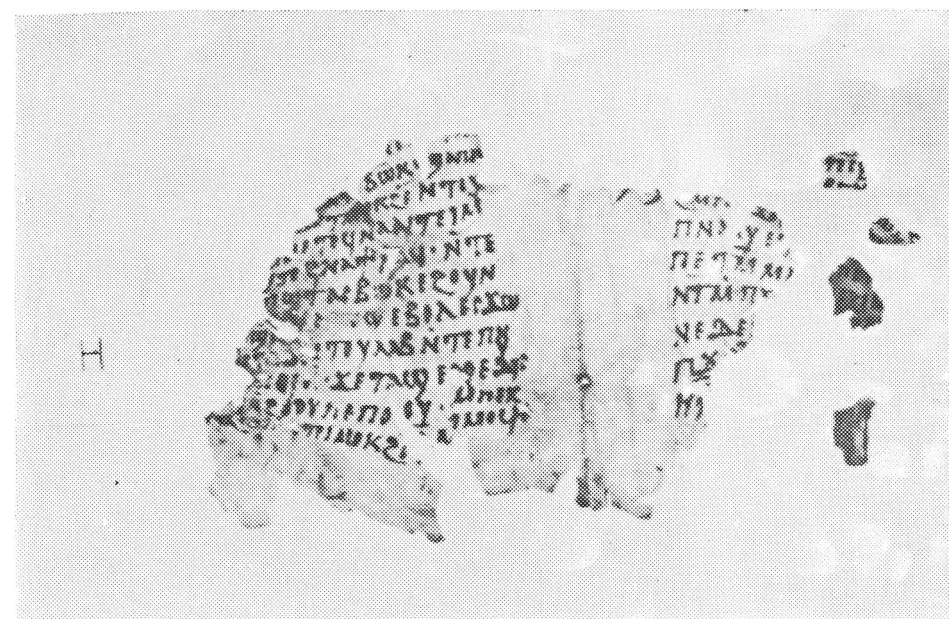


Front face of the two pieces of parchment No. (F+G).

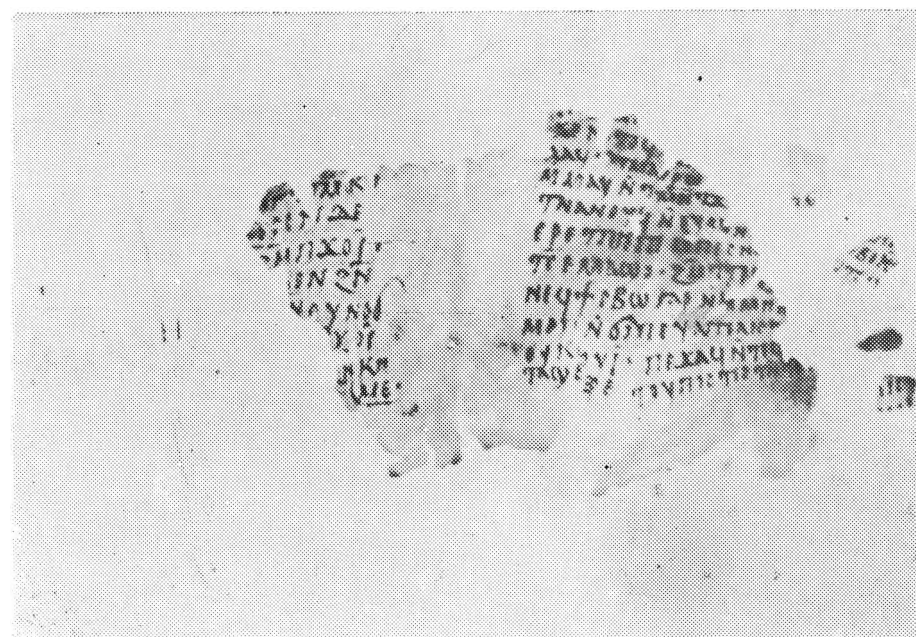


Back face of the two pieces of parchment No. (F+G).

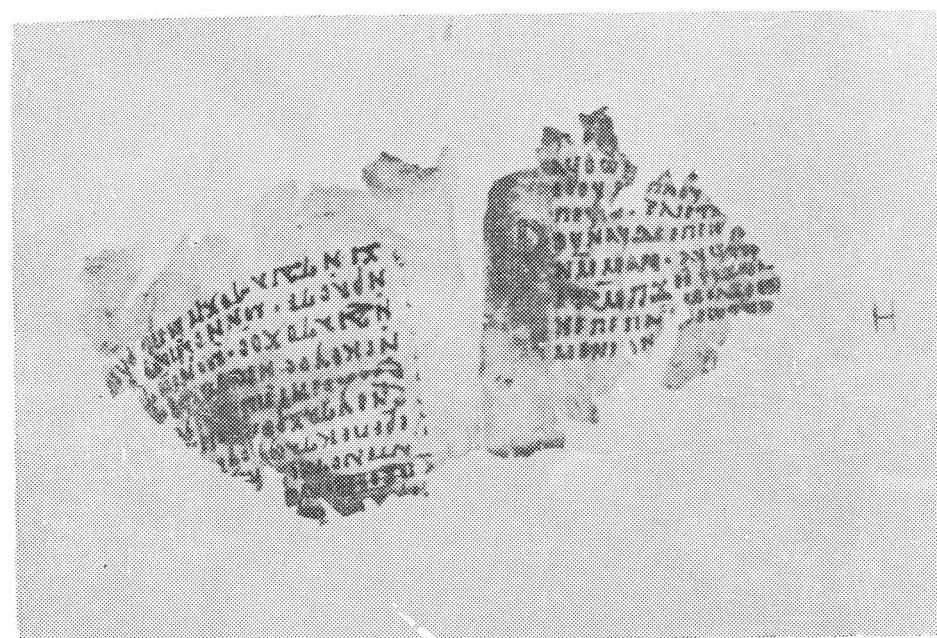




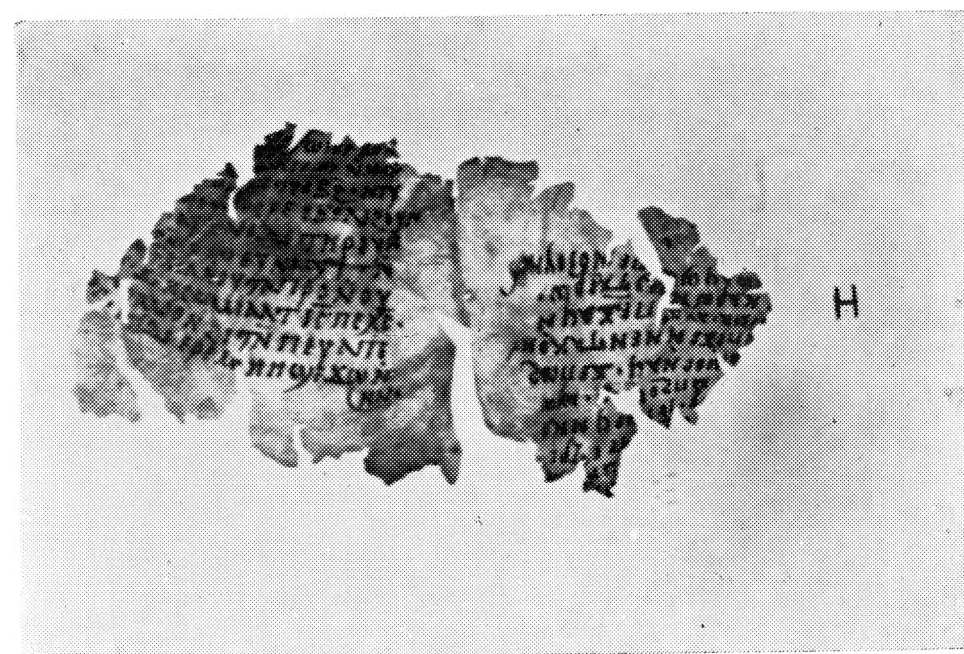
Front face of parchment piece No. (H).



Back face of parchment piece No. (H).



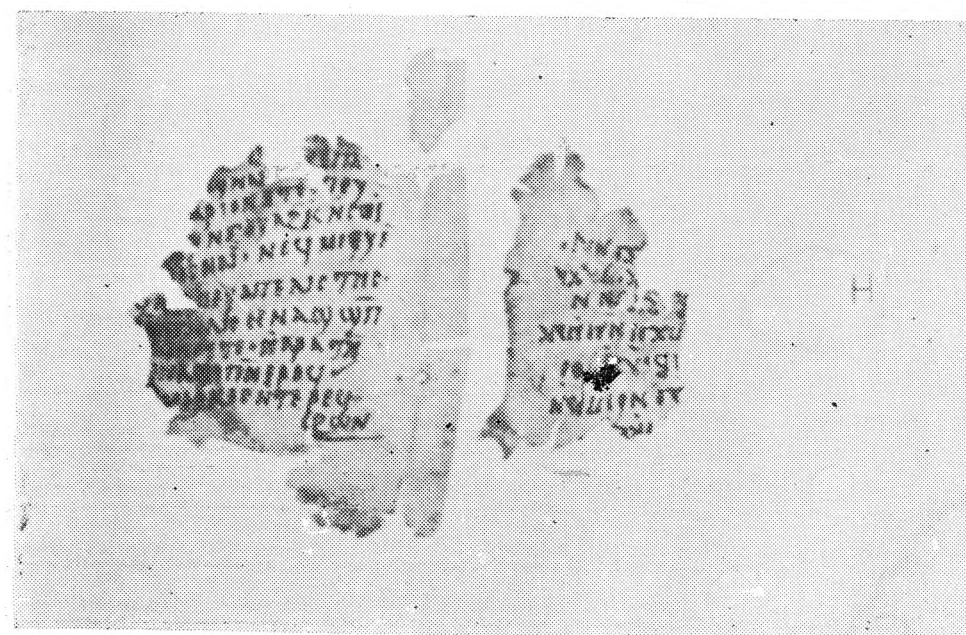
Front face of a piece extracted from the interior of parchment piece No. (H).



Back face of the piece extracted from the interior of parchment— piece No. (H)



Front face of two pieces extracted from the interior of parchment — piece No. (H).



Back face of the two pieces extracted from the interior of parchment — piece No. (H).

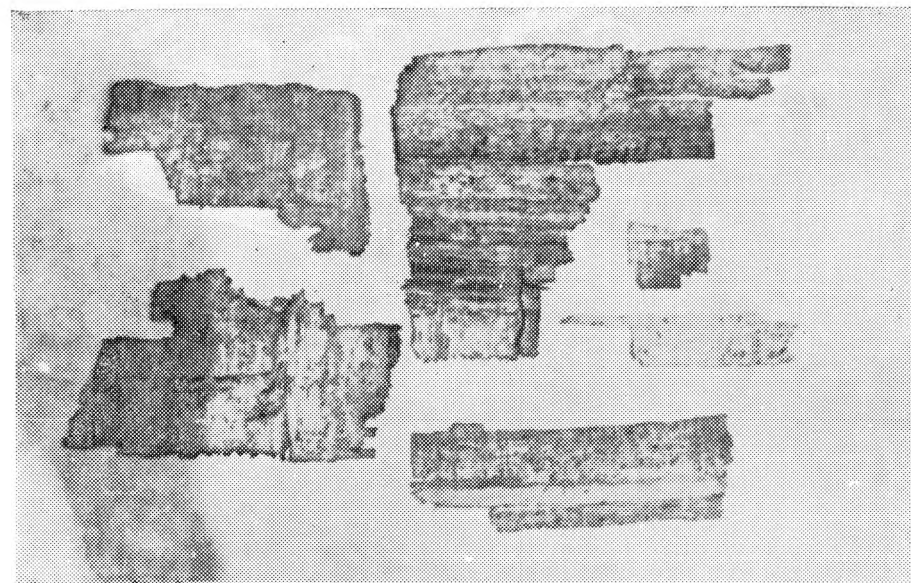




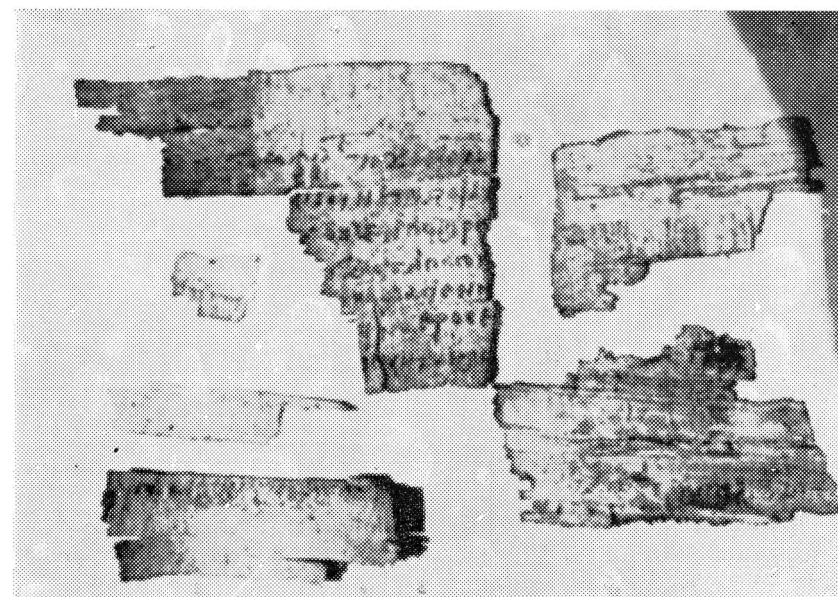
Front face of some pieces extracted from the interior of parchment — piece No. (H).



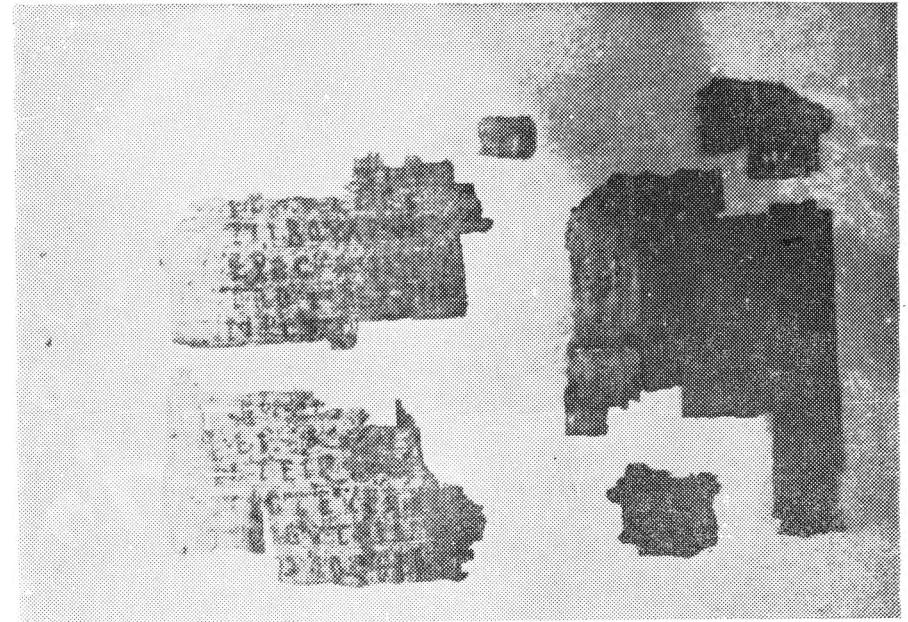
Back face of the pieces extracted from the interior of parchment — piece No. (H).



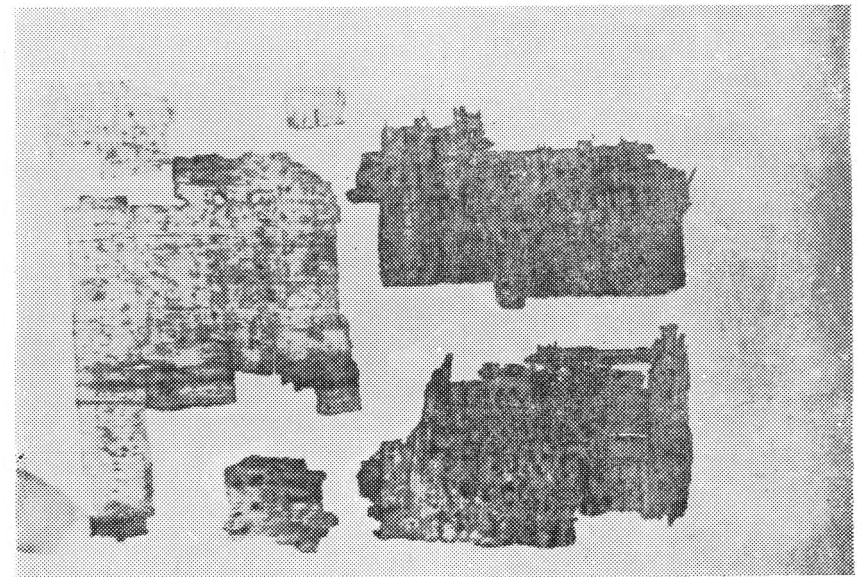
Front face of the first group of papyrus pieces separated from the papyrus mass  
No. (P).



Back face of the first group of papyrus pieces separated from the papyrus mass  
No. (P).

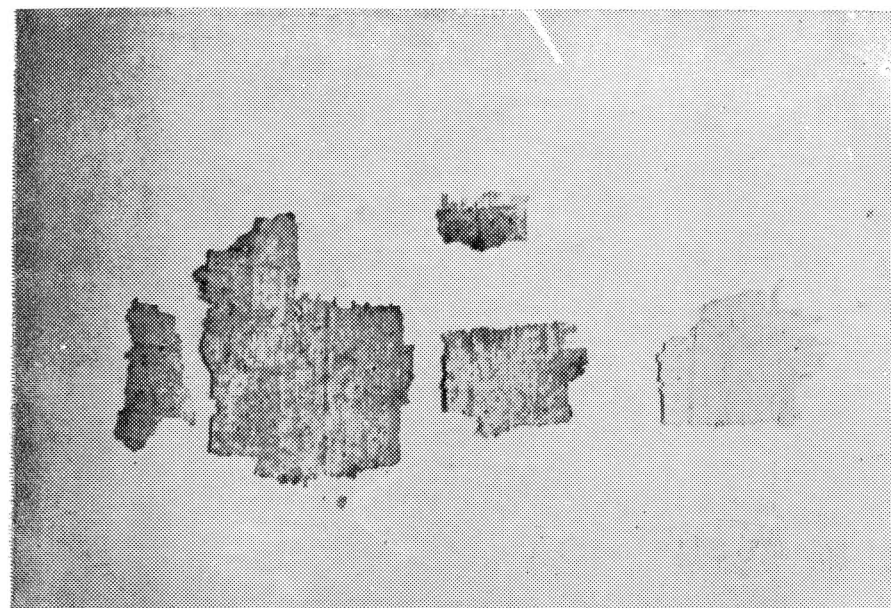


Front face of the second group of papyrus pieces separated from the papyrus mass No. (P).

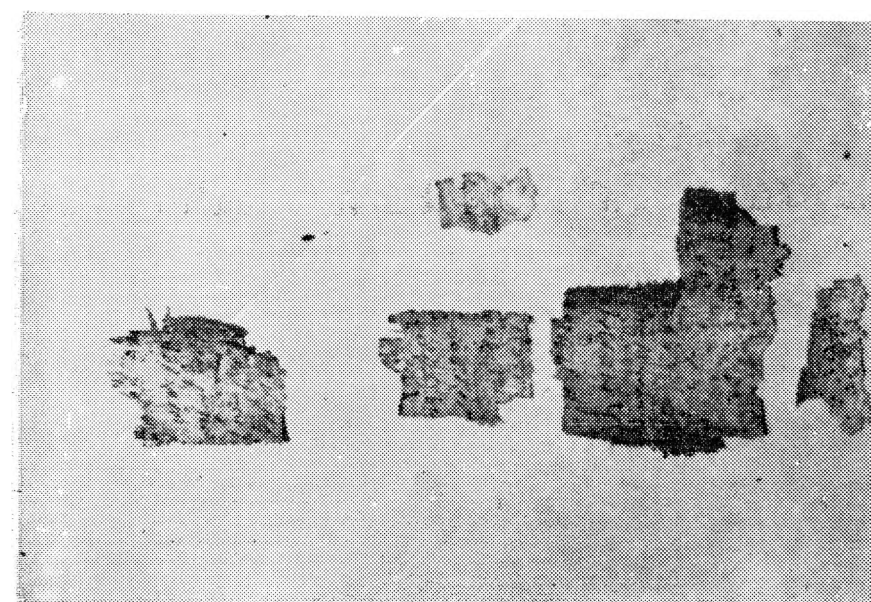


Back face of the second group of papyrus pieces separated from the papyrus mass No. (P).

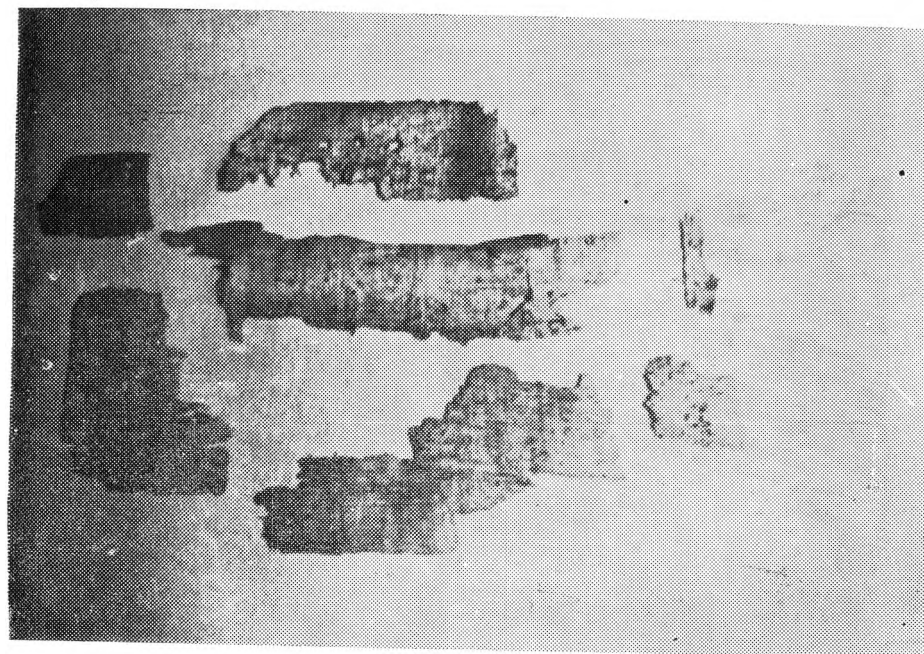




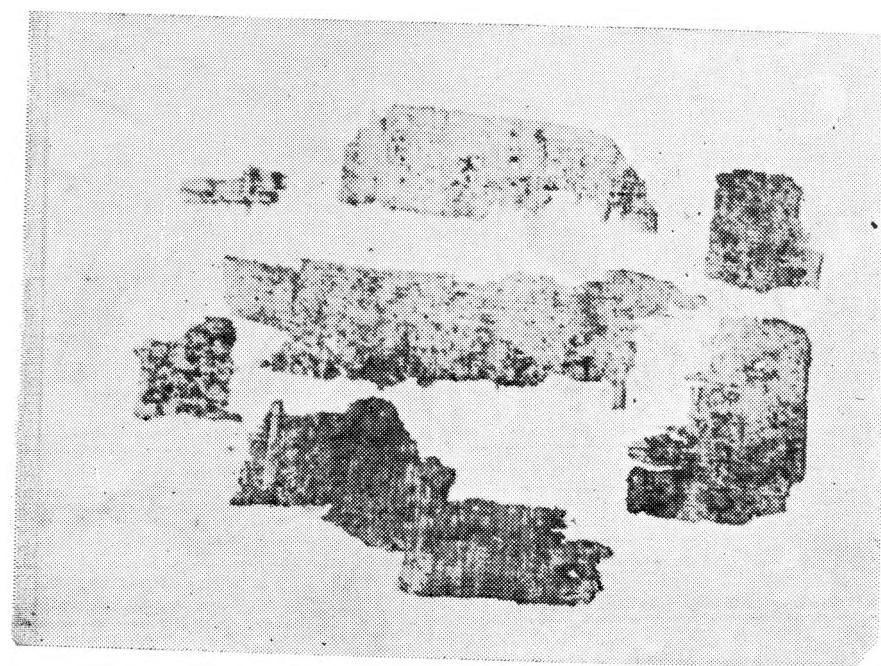
Front face of the third group of papyrus pieces separated from papyrus mass No. (P).



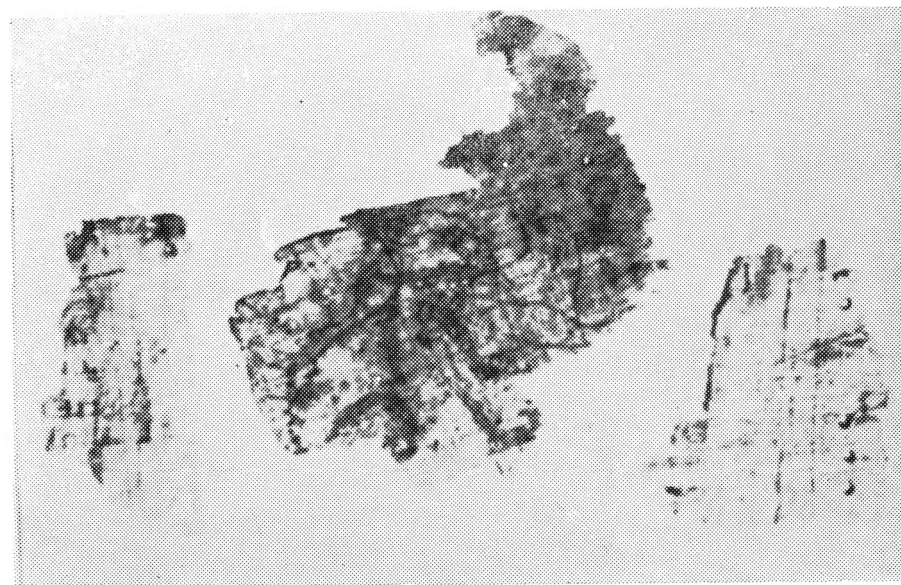
Back face of the third group of papyrus pieces separated from papyrus mass No. (P).



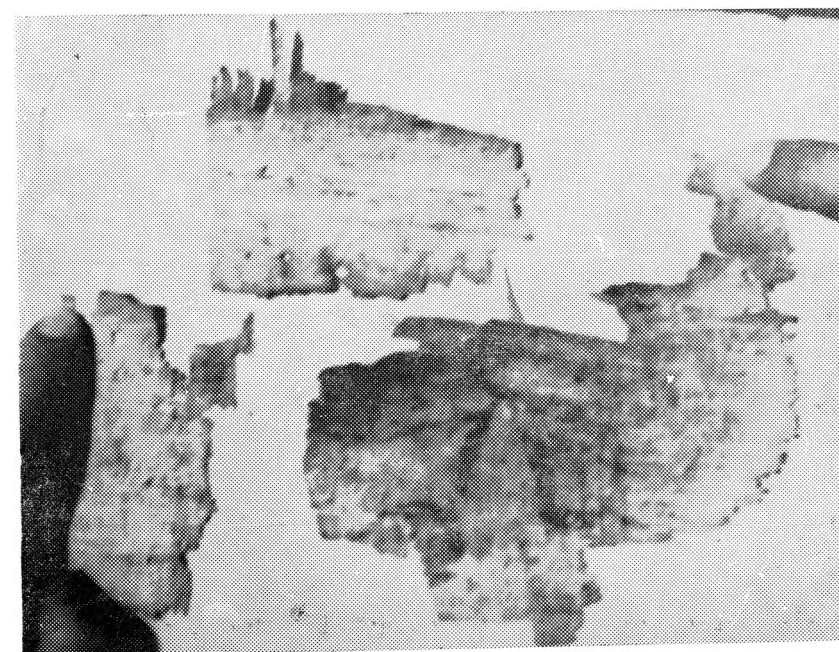
Back face of the fourth group of papyrus pieces separated from papyrus mass No. (P).



Front face of the fourth group of papyrus pieces separated from papyrus mass No. (P).

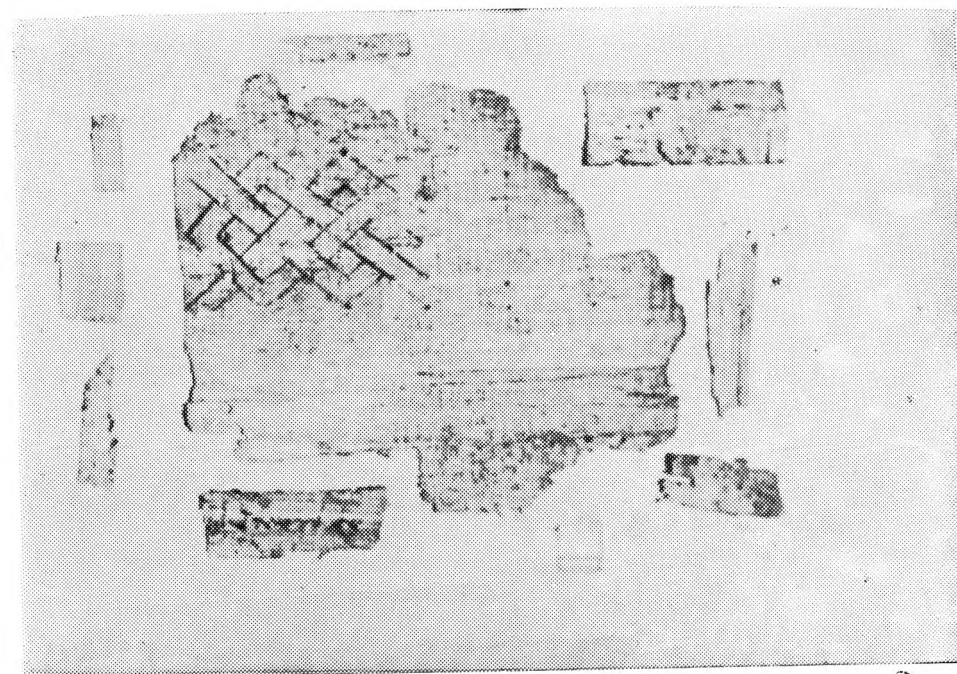


Front face of the third group of papyrus pieces separated from papyrus mass No. (P).

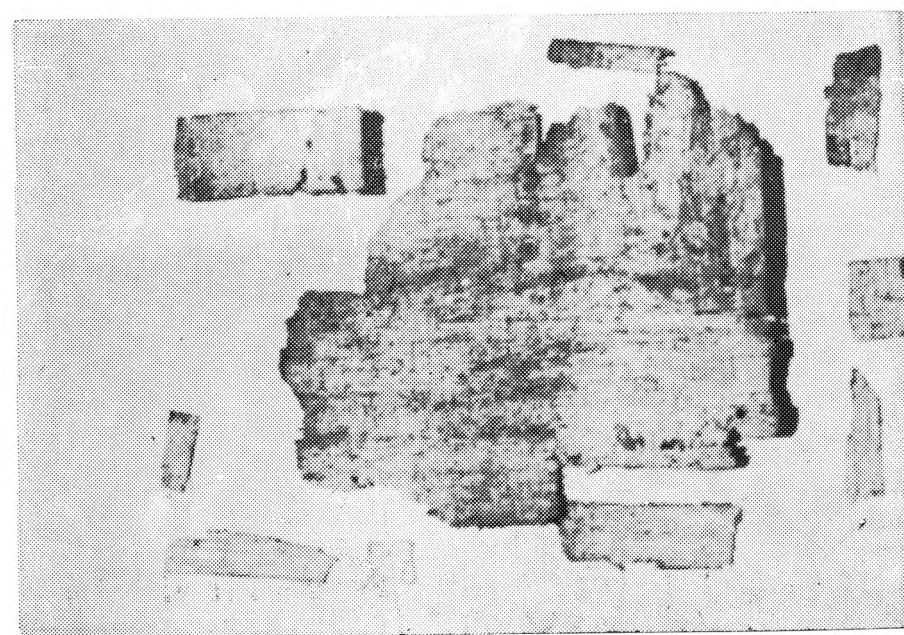


Back face of the fourth group of papyrus pieces separated from papyrus mass No. (P).

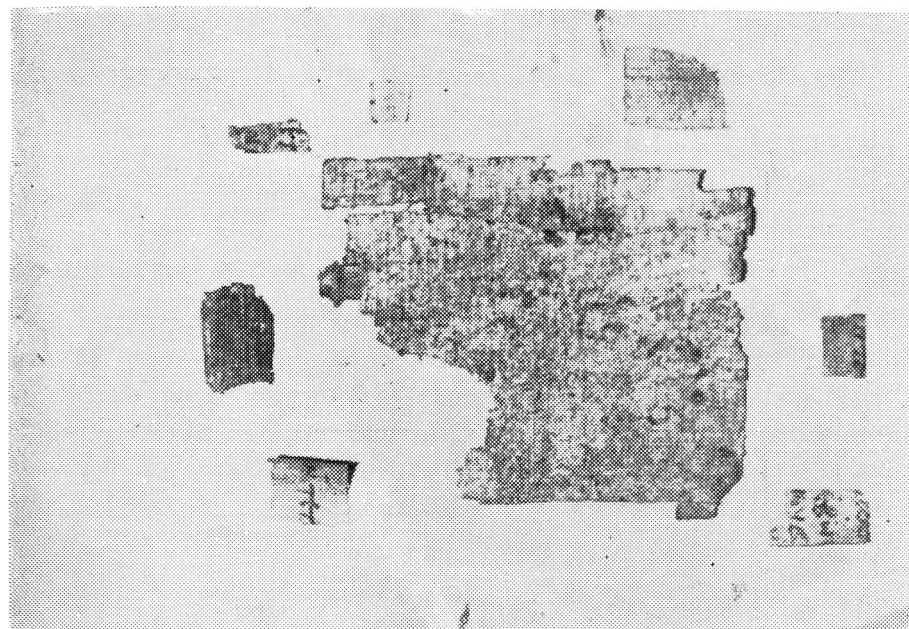




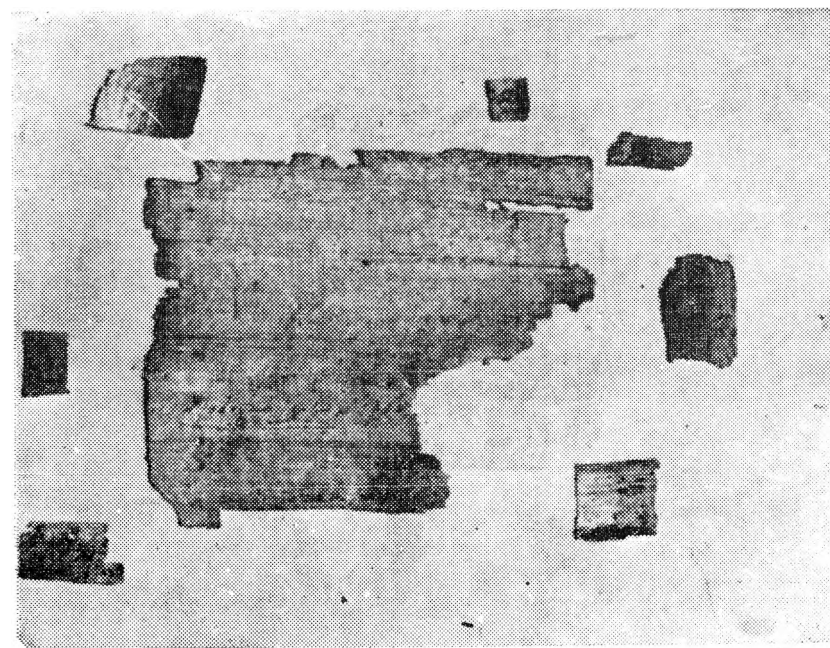
Back face of the fourth group of papyrus pieces separated from papyrus mass No. (P).



Front face of the third group of papyrus pieces separated from papyrus mass No. (P).



Back face of the seventh group of papyrus pieces separated from papyrus mass No. (P).



Front face of the third group of papyrus pieces separated from papyrus mass No. (P).

## TRAVAUX EFFECTUES A SAQQARAH DE FIN NOVEMBRE 1975

AU 20 MARS 1976

PAR J.-Ph. LAUER

### I. Aux monuments de Zoser.

Jusqu'au 15 Janvier, ces travaux n'ont pu être menés qu'au ralenti, en raison de l'épuisement du budget de 1975 et de l'attente de l'utilisation possible des crédits du nouveau budget. Nous n'avons pu, en effet, durant cette période de 7 semaines disposer que de six manoeuvres pour seconder nos équipes d'ouvriers spécialisés. Néanmoins, malgré d'aussi faibles moyens, nous avons réussi à remettre au travail ces équipes sur trois points différents :

1° Au «temple T». Nous avons entrepris la surélévation du mur limitant à l'Est le petit sanctuaire où nous comptons remettre à leur place d'origine les éléments recueillis de deux des trois linteaux qui étaient ornés de piliers *djed*. La réfection du plus grand de ces linteaux, brisé en quatre fragments (voir pl. I, A), vient d'être habilement exécutée par le raïs Abdou Créti; mais il est nécessaire, pour pouvoir le remettre en place, de reconstituer son extrémité Nord qui, cassée, a disparu; nous avons décidé de la remplacer par un élément en béton revêtu de pierre artificielle qui vient d'être préparé; mais l'ensemble ne pourra être remonté qu'au cours de la prochaine campagne.

2° Aux chapelles à colonnes cannelées (côté Ouest de la «cour du Heb Sed»). Sur la seconde de ces chapelles à partir du Sud, nous avons complété jusqu'à la quatrième marche l'escalier qui n'avait pu être reconstitué que jusqu'à la deuxième, au cours de la précédente campagne. Ces deux nouvelles marches, comme les précédentes, ont été moulées en béton et pierre artificielle. Nous avons décidé de limiter ces marches à ce nombre et à ce niveau, afin de bien laisser en évidence dans le sous-bassement de la chapelle la butée de cet escalier, (pl. II, A), évidence qui apporte la preuve de l'existence de ce dernier et de sa destruction. Nous avons, d'autre part, effectué la reconstitution complémentaire du simulacre de barrière de bois limitant la même chapelle vers le Nord; il ne subsistait *in situ* que l'assise inférieure de cette barrière et les extrémités des assises supérieures vers l'Est et l'Ouest (voir pl. II. B).

De plus, à la chapelle suivante, qui ne comporte pas d'escalier et doit rester simplement amorcée, nous avons jugé nécessaire pour l'harmonie de l'ensemble, de rehausser de deux tambours sa colonne Nord et d'une assise le pilastre d'ante qui lui fait suite (voir pl. III).



3° **A la «maison du Sud».** Nous avons protégé par une assise de blocs moulés en béton et pierre artificielle les vestiges ne s'élevant plus que sur une ou deux assises du mur oriental de la cour de cet édifice de part et d'autre de la colonne héraldique de l'Égypte du Sud, dont le chapiteau en forme de lis n'a malheureusement pas été retrouvé ici. Sur cette colonne même, qui ne comportait plus en place que le socle de sa base et le premier tambour de son fût, nous avons ajouté deux nouveaux tambours moulés en béton et pierre artificielle, qui en accusent la visibilité et protégeront ces précieux éléments (pl. I, B).

A la façade même de la «maison du Sud», sur sa première colonne à partir de l'Est, dont le cinquième et dernier tambour conservé à partir de sa base est fort dégradé, nous avons jugé nécessaire d'y ajouter un tambour de protection en béton et pierre artificielle (pl. IV, A).

Quant au chapiteau à feuilles cannelées de la «maison du Sud», nous avons décidé de l'exposer derrière l'entrée de la façade de celle-ci (pl. IV, B), afin de pouvoir le montrer aux spécialistes, tout en le dissimulant aux yeux des grands groupes de touristes qui risqueraient de l'abîmer. La retombée en forme de feuille cannelée, qui était cassée et disparue du côté gauche, a été remodelée en plâtre puis moulée en béton et pierre artificielle.

D'autre part, les deux ou trois premières assises subsistantes du massif de maçonnerie avec simulacre de porte, disposées à l'entrée de la cour de cette «maison du Sud», qui se dégradaient fâcheusement, ont été remplacées ou protégées, suivant les cas, par des blocs de béton et pierre artificielle.

4° **A la colonnade d'entrée.** Nous avons entrepris de rassembler, dans l'Ouest de la grande cour Sud, tous les secteurs de tambours des colonnes fasciculées de la colonnade d'entrée, qui subsistent encore au sol, en vue de leur classement d'après leurs mesures (pl. V, A). Ces éléments, non compris ceux ayant fait partie de leurs chapiteaux, sont au nombre d'environ 600, dont une cinquantaine en fort mauvais état. Nous espérons, après étude de ces secteurs de tambours ainsi reclassés, parvenir à assembler divers tronçons des parties hautes des colonnes, que nous raccorderons ensuite aux fûts en place des premières travées. L'aspect ancien de cette colonnade, avec son éclairage par souterrains latéraux disposés sous son plafond de pierre imitant des rondins, pourrait alors être redonné sur ces travées.

Les mensurations de tous les tambours ont été effectuées; mais un tiers environ de ceux-ci, qui se trouvent encore sur le terre-plein situé au Nord de la colonnade n'ont pu être rassemblés avec les autres dans la grande cour, faute d'un nombre suffisant de manoeuvres.

## II. Au complexe funéraire de l'Horus Sekhem-khet.

Il convenait essentiellement, dans la descenderie du tombeau Sud de ce roi, de dégager l'orifice en tunnel vers l'Ouest, entrevu en fin de déblaiement de celle-ci au cours de la dernière campagne; cela afin de vérifier s'il s'agissait ou non d'un accès aux galeries d'où aurait été tirée l'énorme masse de marne («taffle») nécessaire à la constitution de la vaste terrasse, haute d'une dizaine de mètres, d'où devait émerger la superstructure de ce tombeau Sud.

Avant de pouvoir reprendre le travail en ce point, il fut encore nécessaire d'élargir en gradins autour de la partie occidentale de la descenderie la brèche déjà faite dans le remblai de «taffle» instable (pl. V, B). Cela prit plusieurs semaines; puis, le déblaiement de la descenderie même ne tarda pas à montrer qu'il ne s'agissait, à l'endroit en question, que d'une partie de roc laissée en place et formant arche au-dessus du passage en pente qui la traverse. Le sommet inférieur de cette arche se situe à quelque deux mètres au-dessous de la couche de sable compact à la surface du désert, et la longueur du petit tunnel ainsi formé n'est que de 1 m. 30 environ.

Après cette constatation un peu décevante, le temps nous a fait défaut pour achever le déblaiement de la partie Ouest de la descenderie; nous n'avons pu atteindre que le point de départ de son sol à l'Ouest, qui se trouve au niveau du roc sous la couche de sable compact. Quelques mètres à l'Est de ce départ, la paroi rocheuse méridionale semble présenter une sorte de défoncement, qu'il conviendra d'examiner et de dégager lors de la prochaine campagne, et qui correspondrait peut-être au point d'accès aux galeries d'extraction de «taffle» que nous recherchons.

## III. Aux pyramides de Pépi Ier et de Mérenrê.

Ces travaux aux pyramides à textes de la VI<sup>e</sup> dynastie, entrepris en collaboration avec le Service des Antiquités, dont le délégué a été cette saison M. l'Inspecteur Lotfi Mohammed Farid, ont été exécutés sous les contrôles du Professeur Jean Leclant et de moi-même par la même équipe de base que les années précédentes : Mlle Catherine Berger, égyptologue-épigraphiste, Mlle Isabelle Pierre, dessinatrice spécialisée en hiéroglyphes et M. Audran Labrousse, architecte-archéologue, auxquels s'était joint M. Michael Hainsworth, philologue. En outre, l'équipe a pu bénéficier fréquemment de l'assistance de M. Alain Zivie, égyptologue, ancien pensionnaire de l'IFAO, et de M. Luc Pfrisch, archéologue-égyptologue, professeur coopérant au Caire.

1° **A la pyramide de Pépi Ier.** Après la reconstitution de la majeure part des textes de la paroi orientale de l'antichambre et leur réincorporation à cette paroi, il avait été possible, également au cours de la précédente campagne, de reconstituer la presque totalité des textes de la paroi Sud du passage d'accès à ce que l'on nomme le «serdab». Durant

cette nouvelle campagne, les recherches du Professeur Jean Leclant et de son assistante, Mlle Catherine Berger, ont permis l'identification d'une nouvelle série de fragments inscrits. Ceux-ci ont repris place à la base de la paroi occidentale de l'antichambre, entre son angle Sud-Ouest et le passage conduisant vers l'Ouest à la chambre sépulcrale (pl. VI, A), passage où les éléments inscrits de l'angle Sud-Est ont également été réincorporés. De même, sur la paroi orientale de la chambre sépulcrale, quelques fragments de textes ont pu retrouver leur place sous le gros monolithe inscrit que nous avons remonté à son niveau d'origine l'année dernière (pl. VI, B).

2° **Au temple de Pépi 1er.** Le hall d'entrée a été déblayé, faisant apparaître les vestiges de son dallage d'albâtre, sommairement restauré en dalles de calcaire au cours du Moyen Empire, ainsi que quelques blocs *in situ* de ses parois Nord et Sud. Sur le dallage gisent encore de beaux éléments brisés des énormes blocs disposés en porte-à-faux, qui avaient constitué la voûte étoilée sur fond bleu et ont été effondrés lors de l'exploitation des murs du temple comme carrière au cours du Nouvel Empire (pl. VII, A). Par ailleurs, le magasin XIII, situé immédiatement au Nord de la cour à piliers, qui, ayant servi de four à chaux, est pour cette raison conservé sur plusieurs mètres de hauteur (les pierres de ses parois calcinées n'étant plus utilisables pour des remplois), a fait l'objet d'un déblaiement stratigraphique méthodique (pl. VII, B). Les fragments de poterie, qui y ont été recueillis dans la couche inférieure de chaux subsistant sur son dallage, devraient permettre après leur étude de dater cette couche de façon précise et par conséquent l'utilisation même de ces fours. Dans ce même magasin, des fragments de papyrus hiératiques ont été découverts; ils mentionnent des listes de produits.

Près de la porte d'entrée du temple, un petit fragment de calcaire inscrit à l'encre noire a donné le cartouche d'un Thoutmosis. A quelques mètres plus loin, vers le Sud-Est, une très petite chambre funéraire, disposée au fond d'un puits de briques aménagé dans le remblai, a été mise au jour. Datant de la fin de la VI<sup>e</sup> dynastie ou du début de la Première Période Intermédiaire, elle appartenait à un certain Inépouhem, surnommé Héli, portant les titres de «ami unique, chancelier, prêtre lecteur, scribe des champs». Parmi une quantité de petits modèles de vases en albâtre, se trouvaient deux plaquettes de même matière, dont l'une mentionne les sept huiles saintes, ainsi qu'une petite oie trousse également en albâtre. Ces pièces étaient mêlées à des coupelles et à de petits vases globulaires en terre cuite rouge ordinaire.

Enfin, près de la chaussée, une partie de stèle du Moyen Empire, au nom de Impy-anekh, a été découverte en bon état de conservation.

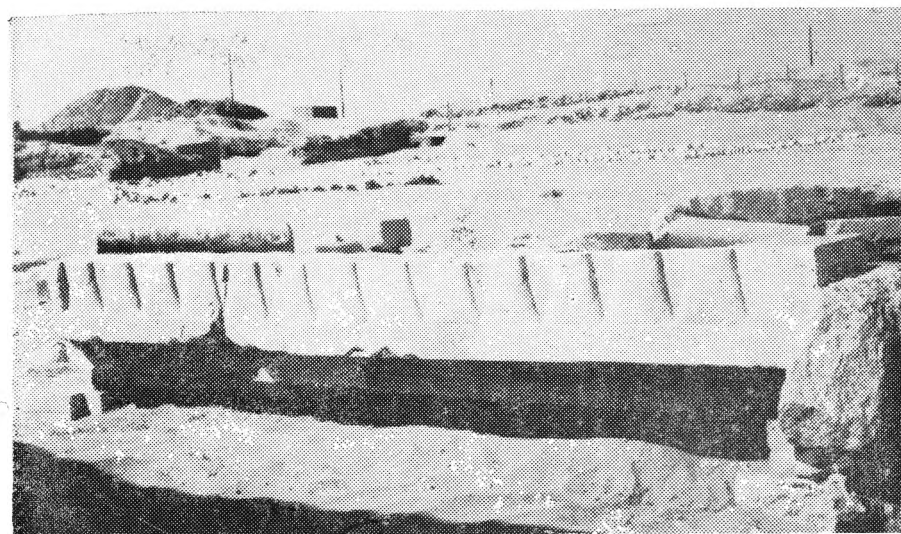
Il a été procédé par ailleurs à la remise en place d'éléments de seuils en granit et au remontage de jambages de porte en même ma-

tière, ornés de la titulature royale gravée, qui avaient été cassés en plusieurs fragments; ceux-ci ont été réassemblés et consolidés par les soins du raïs Abdou Créti, sous le contrôle de notre architecte Audran Labrousse, qui conduit le déblaiement du temple.

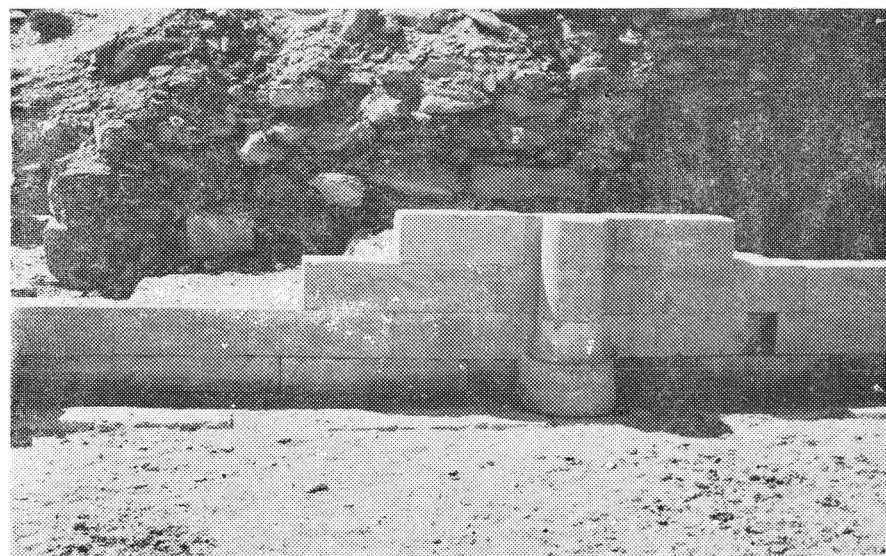
3° **A la pyramide de Mérenrê.** Le déblaiement de l'antichambre et de la salle sépulcrale de cette pyramide n'a pu être repris que depuis le 20 Janvier. Un mur de soutènement, édifié provisoirement sous l'énorme monolithe inscrit découvert antérieurement sous les éboulis, nous a permis de procéder à l'enlèvement des fragments de blocs qui le surmontaient et s'entassaient derrière lui vers l'Est. Une centaine d'éléments inscrits sont ainsi apparus; plusieurs d'entre eux appartiennent à la paroi orientale de l'antichambre, où ils pourront retrouver place sous le monolithe, lorsque celui-ci aura pu être remonté à la sienne.

Mais, avant de procéder à cette difficile opération, il nous a fallu achever le mur de consolidation entrepris sur la face Sud de l'antichambre. Nous avons édifié le mur en tranches parallèles qui progressaient successivement d'Ouest en Est, afin d'arriver jusqu'à l'extrémité Sud du bloc pignon de la paroi orientale. Ce bloc, laissé en porte-à-faux de ce côté par les carriers du Moyen Age, ne pouvait en effet demeurer dans cet état; il se trouve ainsi maintenant étayé.



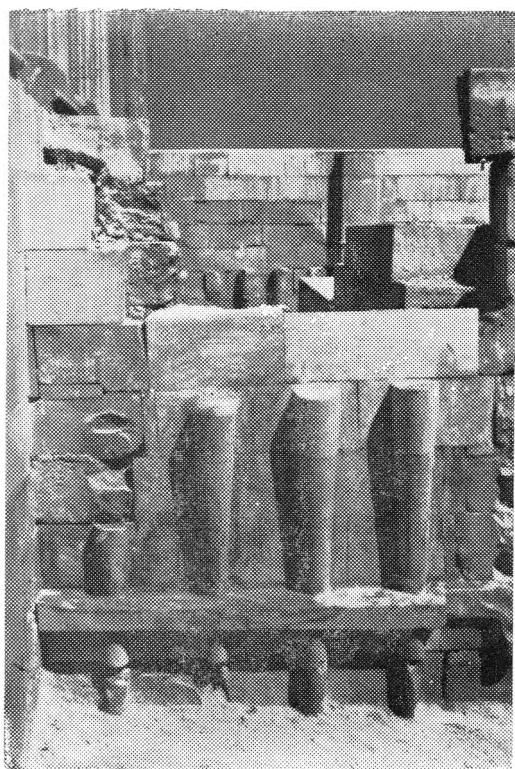


A — Linteau fracturé et incomplet, orné de bases de piliers «djed» en cours de restauration.

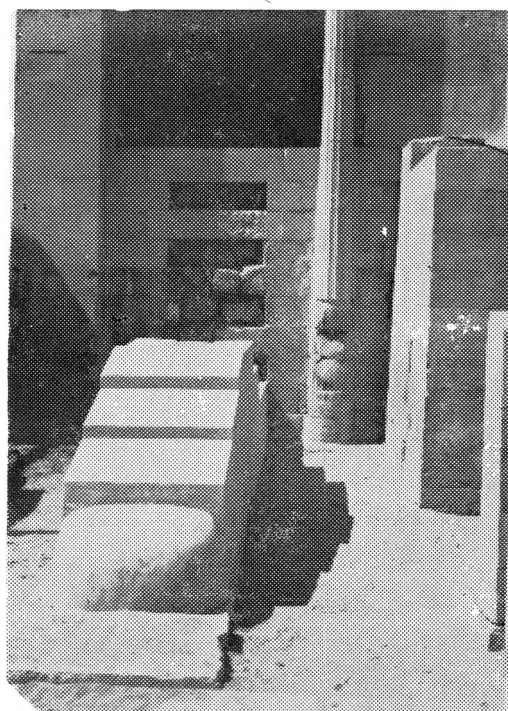


B — Base de la colonne héraldique de l'Egypte du Sud, après mise en place de deux assises protectrices en béton et pierre artificielle.





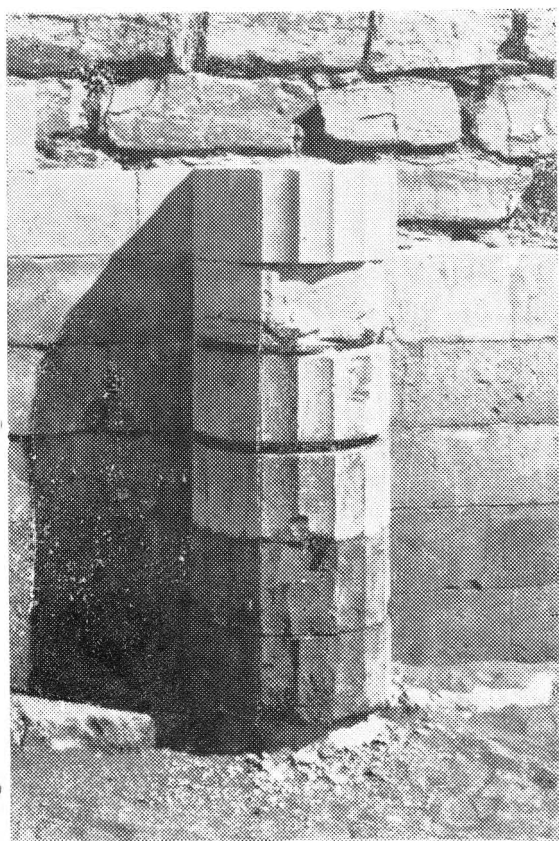
B.- Restauration d'un simulacre de barrière, en haut-relief sur la face sud du mur séparant les 2ème et 3ème chapelles à colonnes cannelées.



A.- Reconstitution des premières marches de l'escalier de la seconde chapelle à colonnes. La destruction de cet escalier est prouvée par les traces de sa butée dans le mur de façade, à gauche de la colonne.



Vue des chapelles de l'Ouest depuis l'angle S.-O. de la «cour de l'Horus  
Remarquer devant l'un des ouvriers les marches d'escalier re- creusement

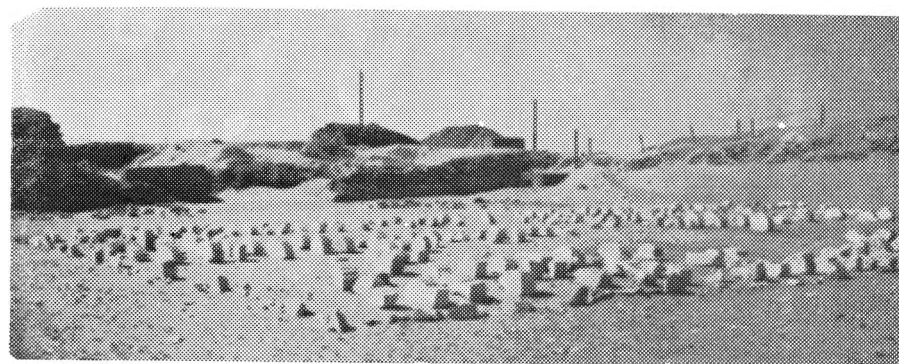


A.- Pose d'un tambour de protection en béton et pierre artificielle sur l'une des colonnes de la «maison du Sud».



B.- Chapiteau, légèrement restauré, de l'une des colonnes cannelées de la «maison du Sud», exposé derrière l'entrée de cet édifice.





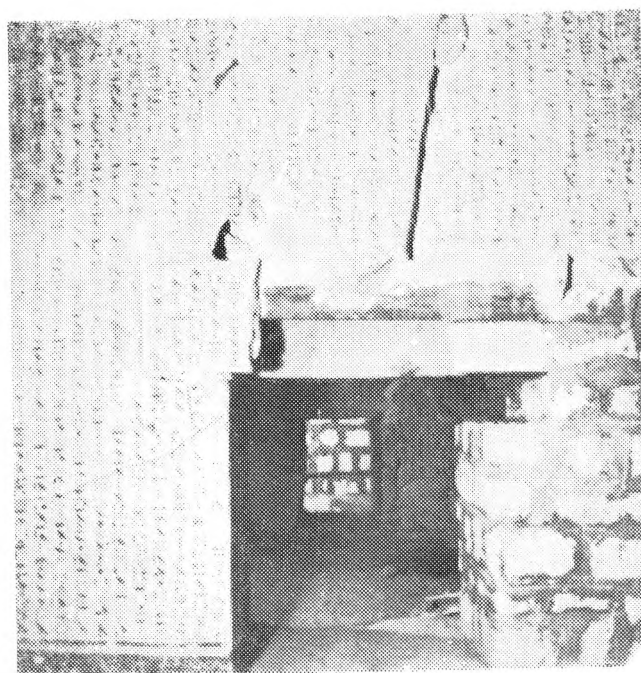
A.- Tambours de la colonnade d'entrée, en cours de reclassement.



B.- Déblaiement du départ de la descenderie du tombeau Sud de l'Horus Sekhem-khet; en A, arche de roc laissée au cours de son creusement.



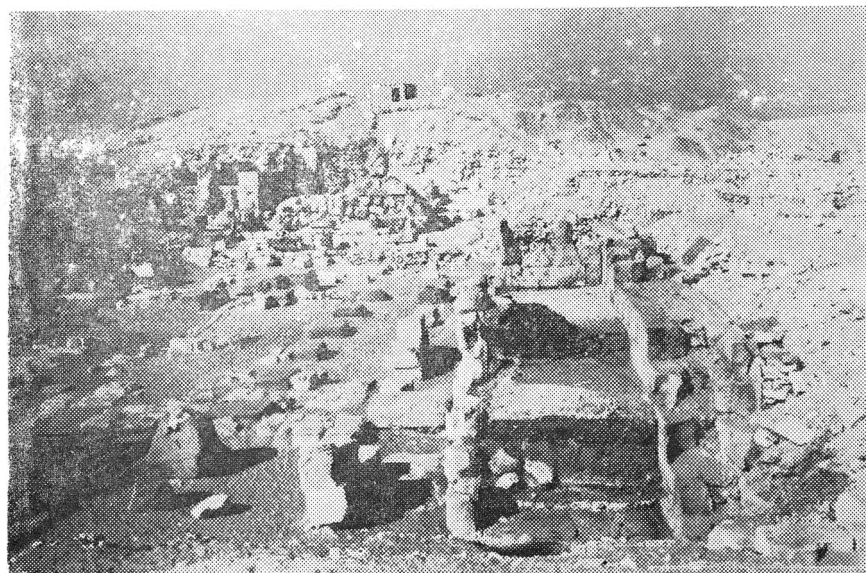
A.- Remise en place de fragments inscrits dans l'angle de l'antichambre et du passage d'accès à la chambre sépulcrale de Pépi Ier.



B.- Débouché du même passage dans la chambre sépulcrale, après remise en place du grands fragments inscrits de sa paroi, au-dessus de ce passage.



A.- Déblaiement du hall d'entrée du temple haut de Pépi Ier montrant des éléments des grands blocs brisés de la voûte étoilée.



B.- Vestiges de la cour à piliers du temple. A droite de celle-ci, un magasin a servi de four à chaux. Son déblaiement atratigraphique montre une alternance de couches de chaux et de couches de combustion contenant des fragments de poterie.




## NOTES ON THE PURIFICATION TENT

By

AHMED ABDEL-HAMID YOUSSEF

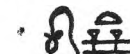
Since the appearance of Grdseloff's study(1), the purification tent "Ibw" to which he had drawn the attention, has been the subject of differing points of view as to the interpretation of its scenes depicted in a number of Old Kingdom tombs(2). Apparently from its scenes and its word determinatives, the tent was a light rectangular structure of slender wooden poles draped by matting all around, and provided with two doors on each end.

It was erected along the west bank of the Nile proper or a canal branching therefrom, being of a funerary function, where the deceased had to be washed and purified before he could be admitted into the sacred territory, i.e. the necropolis.

The differing points of view have actually dealt with an element that stretched from the water side vertically up to the middle of the tent. Grdseloff was of the opinion that it was a broad ramp that ran steep from the middle of the tent into the water and provided with a gutter that served in draining away the water plentifully used in washing the corpse(3). Hence, he interpreted the Old kingdom determinative appended to its name 

as the skeleton of the tent with the middle drainage ramp corresponding in form with the purification tent of Mereruka, Kar and Idw(4) (Fig. 1).

Alex. Badawi suggested a covered ramp similar in structure to the tent itself employed for heaving the sarcophagus from the bank directly into the purification cell (5). Yet, this is no more than a conjecture that is difficult to accept; the scenes show only two doorways, both explicitly inscribed in Kar



to which the scribe could have added a third one if any.

(Fig. 1).

Drioton in his 'Recension'(6) on Grdseloff's study could not accept his interpretations of the draining ramp "Abflussrampe".

1. B. Grdseloff. *Das Agyptische Reinigungszelt*, Cairo 1941.
2. *Op. cit.*, p. 2 f.; Blackman-Apted, *Rock Tombs of Meir* Vol. V pls. XLII, XLIII.
3. Grdseloff, *op. cit.*, p. 10.
4. *Op. cit.*, p. 21.
5. Alex. Badawy, *Le dessin architectural chez les anciens Egyptiens* (1948) p. 210, fig. 245.
6. *ASAE* XL, p. 1009 f.

He based his opinion on the fact that the Ancient Egyptians would not allow the washing water to be thrown back into the river; this would be dangerous both for the deceased of whom a relic may fall into the hands of a malignant magician, and for the Nile waters which would be polluted; he introduced evidence of the precautionary measures the Egyptians took in getting rid of such waste as blood stained-pieces of cloth used in embalmment. He therefore suggested the plan of a T formed basin serving as a terminus for boats crossing the river to the tent which was as he put it 'douane rituel'. The determinative

he concluded, indicates nothing but the relation of the landing place absolutely corresponding to the later Middle Kingdom ortho-

graphy which suggests simply, he said, the situation of

this tent at the water edge"; (7) a conclusion arrived at, through a correlation between the Old Kingdom determinatives and those of the Middle Kingdom as follows:

4 J B III

4 J B C

4 J B D

4 J B E

4 J B F

4 J B G

In my opinion, the suggested T formed basin which applies to temples is quite unlikely in our case. From the various scenes and inscriptions, it is now concluded that each noble in the Old Kingdom had his own purification tent,(10) and it is too far from Egyptian practice to dig such a basin (to harbour the funerary procession ships) for such a light structure of temporary nature and function.

The element in question, therefore, can be nothing else but a quay with a ramp or causeway leading to the tent. The temple quays(11) must have been a model in this respect (see fig. 2.5). It is easier to build or even form it in earth.

7. ASAE XL, p. 1011.

8. cf. Grdseloff, op. cit., pp. 21 f.

9. Barguet, P. Letemple d'Amon a Karnak, (1962), p. 40.

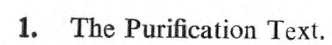
10. Urk I 18; Grdseloff, op. cit., pp. 1 ff.

11. Legrain, Les temples de Karnak, (1929), figs. 2,5,11.

Apart from the fact that this quay — determinative still affords the notion of the tent's situation from water, it can still give the most important notion frequently expressed in Old kingdom funerary texts i.e. "the landing of the deceased in the West"; that landing that takes place under the auspices of the gods.

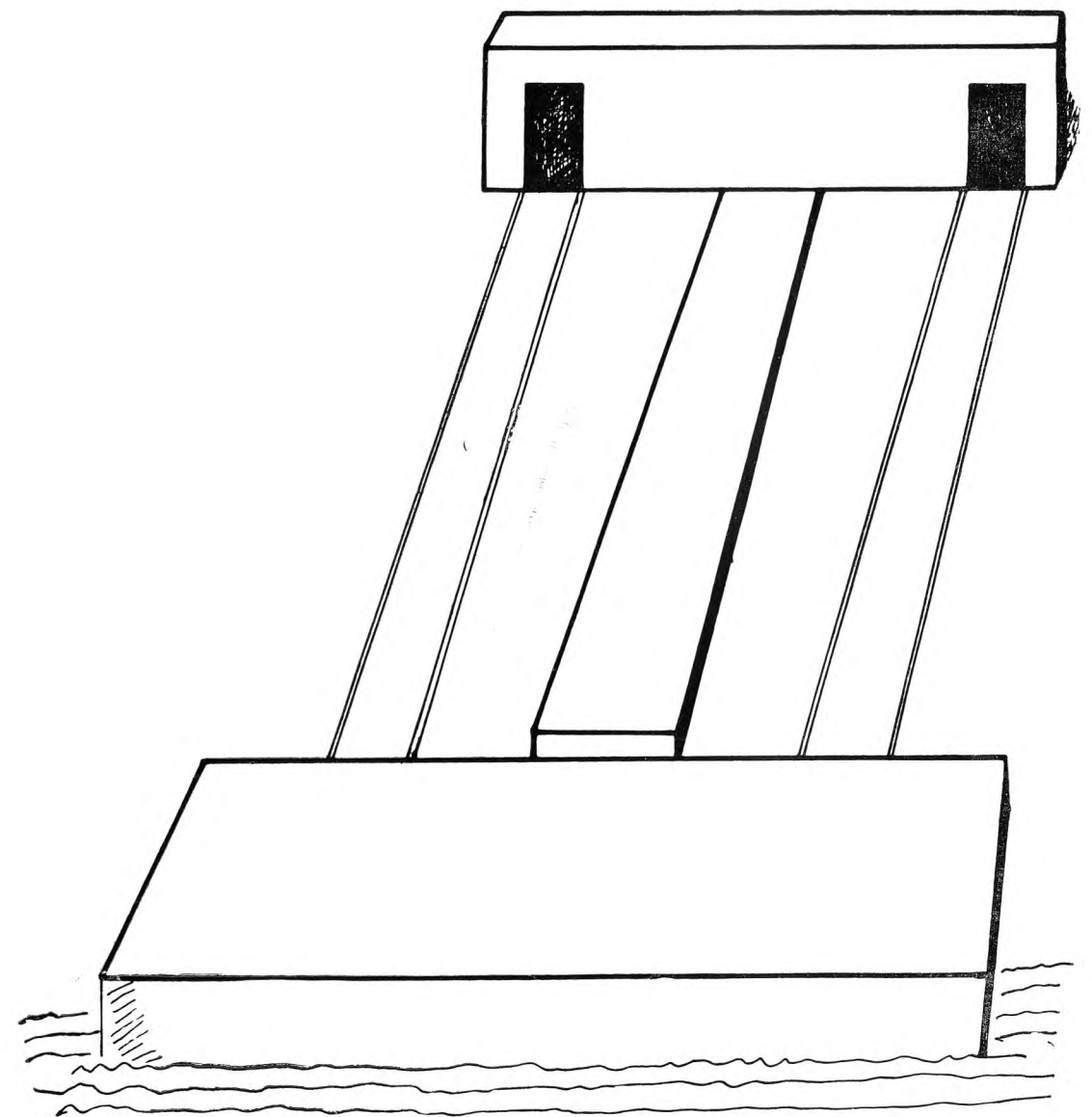
𓂏𓂐𓂑𓂒𓂓𓂔𓂕𓂖𓂗𓂘𓂙𓂚𓂛𓂜𓂝𓂞𓂟𓂠𓂡𓂢𓂣𓂤𓂥𓂦𓂧𓂨𓂩𓂪𓂫𓂬𓂭𓂮𓂯𓂰𓂱𓂲𓂳𓂴𓂵𓂶𓂷𓂸𓂹𓂺𓂻𓂼𓂽𓂾𓂿𓃀𓃁𓃂𓃃𓃄𓃅𓃆𓃇𓃈𓃉𓃊𓃋𓃌𓃍𓃎𓃏𓃐𓃑𓃒𓃓𓃔𓃕𓃖𓃗𓃘𓃙𓃚𓃛𓃜𓃝𓃞𓃟𓃠𓃡𓃢𓃣𓃤𓃥𓃦𓃧𓃨𓃩𓃪𓃫𓃬𓃭𓃮𓃯𓃰𓃱𓃲𓃳𓃴𓃵𓃶𓃷𓃸𓃹𓃺𓃻𓃼𓃽𓃾𓃿𓄀𓄁𓄂𓄃𓄄𓄅𓄆𓄇𓄈𓄉𓄊𓄋𓄌𓄍𓄎𓄏𓄐𓄑𓄒𓄓𓄔𓄕𓄖𓄗𓄘𓄙𓄚𓄛𓄜𓄝𓄞𓄟𓄠𓄡𓄢𓄣𓄤𓄥𓄦𓄧𓄨𓄩𓄪𓄫𓄬𓄭𓄮𓄯𓄰𓄱𓄲𓄳𓄴𓄵𓄶𓄷𓄸𓄹𓄺𓄻𓄼𓄽𓄾𓄿𓅀𓅁𓅂𓅃𓅄𓅅𓅆𓅇𓅈𓅉𓅊𓅋𓅌𓅍𓅎𓅏𓅐𓅑𓅒𓅓𓅔𓅕𓅖𓅗𓅘𓅙𓅚𓅛𓅜𓅝𓅞𓅟𓅠𓅡𓅢𓅣𓅤𓅥𓅦𓅧𓅨𓅩𓅪𓅫𓅬𓅭𓅮𓅯𓅰𓅱𓅲𓅳𓅴𓅵𓅶𓅷𓅸𓅹𓅺𓅻𓅼𓅽𓅾𓅿𓆀𓆁𓆂𓆃𓆄𓆅𓆆𓆇𓆈𓆉𓆊𓆋𓆌𓆍𓆎𓆏𓆐𓆑𓆒𓆓𓆔𓆕𓆖𓆗𓆘𓆙𓆚𓆛𓆜𓆝𓆞𓆟𓆠𓆡𓆢𓆣𓆤𓆥𓆦𓆧𓆨𓆩𓆪𓆫𓆬𓆭𓆮𓆯𓆰𓆱𓆲𓆳𓆴𓆵𓆶𓆷𓆸𓆹𓆺𓆻𓆼𓆽𓆾𓆿𓇀𓇁𓇂𓇃𓇄𓇅𓇆𓇇𓇈𓇉𓇊𓇋𓇌𓇍𓇎𓇏𓇐𓇑𓇒𓇓𓇔𓇕𓇖𓇗𓇘𓇙𓇚𓇛𓇜𓇝𓇞𓇟𓇠𓇡𓇢𓇣𓇤𓇥𓇦𓇧𓇨𓇩𓇪𓇫𓇬𓇭𓇮𓇯𓇰𓇱𓇲𓇳𓇴𓇵𓇶𓇷𓇸𓇹𓇺𓇻𓇼𓇽𓇾𓇿𓈀𓈁𓈂𓈃𓈄𓈅𓈆𓈇𓈈𓈉𓈊𓈋𓈌𓈍𓈎𓈏𓈐𓈑𓈒𓈓𓈔𓈕𓈖𓈗𓈘𓈙𓈚𓈛𓈜𓈝𓈞𓈟𓈠𓈡𓈢𓈣𓈤𓈥𓈦𓈧𓈨𓈩𓈪𓈫𓈬𓈭𓈮𓈯𓈰𓈱𓈲𓈳𓈴𓈵𓈶𓈷𓈸𓈹𓈺𓈻𓈼𓈽𓈾𓈿𓉀𓉁𓉂𓉃𓉄𓉅𓉆𓉇𓉈𓉉𓉊𓉋𓉌𓉍𓉎𓉏𓉐𓉑𓉒𓉓𓉔𓉕𓉖𓉗𓉘𓉙𓉚𓉛𓉜𓉝𓉞𓉟𓉠𓉡𓉢𓉣𓉤𓉥𓉦𓉧𓉨𓉩𓉪𓉫𓉬𓉭𓉮𓉯𓉰𓉱𓉲𓉳𓉴𓉵𓉶𓉷𓉸𓉹𓉺𓉻𓉼𓉽𓉾𓉿𓊀𓊁𓊂𓊃𓊄𓊅𓊆𓊇𓊈𓊉𓊊𓊋𓊌𓊍𓊎𓊏𓊐𓊑𓊒𓊓𓊔𓊕𓊖𓊗𓊘𓊙𓊚𓊛𓊜𓊝𓊞𓊟𓊠𓊡𓊢𓊣𓊤𓊥𓊦𓊧𓊨𓊩𓊪𓊫𓊬𓊭𓊮𓊯𓊰𓊱𓊲𓊳𓊴𓊵𓊶𓊷𓊸𓊹𓊺𓊻𓊼𓊽𓊾𓊿𓋀𓋁𓋂𓋃𓋄𓋅𓋆𓋇𓋈𓋉𓋊𓋋𓋌𓋍𓋎𓋏𓋐𓋑𓋒𓋓𓋔𓋕𓋖𓋗𓋘𓋙𓋚𓋛𓋜𓋝𓋞𓋟𓋠𓋡𓋢𓋣𓋤𓋥𓋦𓋧𓋨𓋩𓋪𓋫𓋬𓋭𓋮𓋯𓋰𓋱𓋲𓋳𓋴𓋵𓋶𓋷𓋸𓋹𓋺𓋻𓋼𓋽𓋾𓋿𓌀𓌁𓌂𓌃𓌄𓌅𓌆𓌇𓌈𓌉𓌊𓌋𓌌𓌍𓌎𓌏𓌐𓌑𓌒𓌓𓌔𓌕𓌖𓌗𓌘𓌙𓌚𓌛𓌜𓌝𓌞𓌟𓌠𓌡𓌢𓌣𓌤𓌥𓌦𓌧𓌨𓌩𓌪𓌫𓌬𓌭𓌮𓌯𓌰𓌱𓌲𓌳𓌴𓌵𓌶𓌷𓌸𓌹𓌺𓌻𓌼𓌽𓌾𓌿𓍀𓍁𓍂𓍃𓍄𓍅𓍆𓍇𓍈𓍉𓍊𓍋𓍌𓍍𓍎𓍏𓍐𓍑𓍒𓍓𓍔𓍕𓍖𓍗𓍘𓍙𓍚𓍛𓍜𓍝𓍞𓍟𓍠𓍡𓍢𓍣𓍤𓍥𓍦𓍧𓍨𓍩𓍪𓍫𓍬𓍭𓍮𓍯𓍰𓍱𓍲𓍳𓍴𓍵𓍶𓍷𓍸𓍹𓍺𓍻𓍼𓍽𓍾𓍿𓎀𓎁𓎂𓎃𓎄𓎅𓎆𓎇𓎈𓎉𓎊𓎋𓎌𓎍𓎎𓎏𓎐𓎑𓎒𓎓𓎔𓎕𓎖𓎗𓎘𓎙𓎚𓎛𓎜𓎝𓎞𓎟𓎠𓎡𓎢𓎣𓎤𓎥𓎦𓎧𓎨𓎩𓎪𓎫𓎬𓎭𓎮𓎯𓎰𓎱𓎲𓎳𓎴𓎵𓎶𓎷𓎸𓎹𓎺𓎻𓎼𓎽𓎾𓎿𓏀𓏁𓏂𓏃𓏄𓏅𓏆𓏇𓏈𓏉𓏊𓏋𓏌𓏍𓏎𓏏𓏐𓏑𓏒𓏓𓏔𓏕𓏖𓏗𓏘𓏙𓏚𓏛𓏜𓏝𓏞𓏟𓏠𓏡𓏢𓏣𓏤𓏥𓏦𓏧𓏨𓏩𓏪𓏫𓏬𓏭𓏮𓏯𓏰𓏱𓏲𓏳𓏴𓏵𓏶𓏷𓏸𓏹𓏺𓏻𓏼𓏽𓏾𓏿𓐀𓐁𓐂𓐃𓐄𓐅𓐆𓐇𓐈𓐉𓐊𓐋𓐌𓐍𓐎𓐏𓐐𓐑𓐒𓐓𓐔𓐕𓐖𓐗𓐘𓐙𓐚𓐛𓐜𓐝𓐞𓐟𓐠𓐡𓐢𓐣𓐤𓐥𓐦𓐧𓐨𓐩𓐪𓐫𓐬𓐭𓐮𓐯𓐰𓐱𓐲𓐳𓐴𓐵𓐶𓐷𓐸𓐹𓐺𓐻𓐼𓐽𓐾𓐿𓑀𓑁𓑂𓑃𓑄𓑅𓑆𓑇𓑈𓑉𓑊𓑋𓑌𓑍𓑎𓑏𓑐𓑑𓑒𓑓𓑔𓑕𓑖𓑗𓑘𓑙𓑚𓑛𓑜𓑝𓑞𓑟𓑠𓑡𓑢𓑣𓑤𓑥𓑦𓑧𓑨𓑩𓑪𓑫𓑬𓑭𓑮𓑯𓑰𓑱𓑲𓑳𓑴𓑵𓑶𓑷𓑸𓑹𓑺𓑻𓑼𓑽𓑾𓑿𓒀𓒁𓒂𓒃𓒄𓒅𓒆𓒇𓒈𓒉𓒊𓒋𓒌𓒍𓒎𓒏𓒐𓒑𓒒𓒓𓒔𓒕𓒖𓒗𓒘𓒙𓒚𓒛𓒜𓒝𓒞𓒟𓒠𓒡𓒢𓒣𓒤𓒥𓒦𓒧𓒨𓒩𓒪𓒫𓒬𓒭𓒮𓒯𓒰𓒱𓒲𓒳𓒴𓒵𓒶𓒷𓒸𓒹𓒺𓒻𓒼𓒽𓒾𓒿𓓀𓓁𓓂𓓃𓓄𓓅𓓆𓓇𓓈𓓉𓓊𓓋𓓌𓓍𓓎𓓏𓓐𓓑𓓒𓓓𓓔𓓕𓓖𓓗𓓘𓓙𓓚𓓛𓓜𓓝𓓞𓓟𓓠𓓡𓓢𓓣𓓤𓓥𓓦𓓧𓓨𓓩𓓪𓓫𓓬𓓭𓓮𓓯𓓰𓓱𓓲𓓳𓓴𓓵𓓶𓓷𓓸𓓹𓓺𓓻𓓼𓓽𓓾𓓿𓔀𓔁𓔂𓔃𓔄𓔅𓔆𓔇𓔈𓔉𓔊𓔋𓔌𓔍𓔎𓔏𓔐𓔑𓔒𓔓𓔔𓔕𓔖𓔗𓔘𓔙𓔚𓔛𓔜𓔝𓔞𓔟𓔠𓔡𓔢𓔣𓔤𓔥𓔦𓔧𓔨𓔩𓔪𓔫𓔬𓔭𓔮𓔯𓔰𓔱𓔲𓔳𓔴𓔵𓔶𓔷𓔸𓔹𓔺𓔻𓔼𓔽𓔾𓔿𓕀𓕁𓕂𓕃𓕄𓕅𓕆𓕇𓕈𓕉𓕊𓕋𓕌𓕍𓕎𓕏𓕐𓕑𓕒𓕓𓕔𓕕𓕖𓕗𓕘𓕙𓕚𓕛𓕜𓕝𓕞𓕟𓕠𓕡𓕢𓕣𓕤𓕥𓕦𓕧𓕨𓕩𓕪𓕫𓕬𓕭𓕮𓕯𓕰𓕱𓕲𓕳𓕴𓕵𓕶𓕷𓕸𓕹𓕺𓕻𓕼𓕽𓕾𓕿𓖀𓖁𓖂𓖃𓖄𓖅𓖆𓖇𓖈𓖉𓖊𓖋𓖌𓖍𓖎𓖏𓖐𓖑𓖒𓖓𓖔𓖕𓖖𓖗𓖘𓖙𓖚𓖛𓖜𓖝𓖞𓖟𓖠𓖡𓖢𓖣𓖤𓖥𓖦𓖧𓖨𓖩𓖪𓖫𓖬𓖭𓖮𓖯𓖰𓖱𓖲𓖳𓖴𓖵𓖶𓖷𓖸𓖹𓖺𓖻𓖼𓖽𓖾𓖿𓗀𓗁𓗂𓗃𓗄𓗅𓗆𓗇𓗈𓗉𓗊𓗋𓗌𓗍𓗎𓗏𓗐𓗑𓗒𓗓𓗔𓗕𓗖𓗗𓗘𓗙𓗚𓗛𓗜𓗝𓗞𓗟𓗠𓗡𓗢𓗣𓗤𓗥𓗦𓗧𓗨𓗩𓗪𓗫𓗬𓗭𓗮𓗯𓗰𓗱𓗲𓗳𓗴𓗵𓗶𓗷𓗸𓗹𓗺𓗻𓗼𓗽𓗾𓗿𓘀𓘁𓘂𓘃𓘄𓘅𓘆𓘇𓘈𓘉𓘊𓘋𓘌𓘍𓘎𓘏𓘐𓘑𓘒𓘓𓘔𓘕𓘖𓘗𓘘𓘙𓘚𓘛𓘜𓘝𓘞𓘟𓘠𓘡𓘢𓘣𓘤𓘥𓘦𓘧𓘨𓘩𓘪𓘫𓘬𓘭𓘮𓘯𓘰𓘱𓘲𓘳𓘴𓘵𓘶𓘷𓘸𓘹𓘺𓘻𓘼𓘽𓘾𓘿𓙀𓙁𓙂𓙃𓙄𓙅𓙆𓙇𓙈𓙉𓙊𓙋𓙌𓙍𓙎𓙏𓙐𓙑𓙒𓙓𓙔𓙕𓙖𓙗𓙘𓙙𓙚𓙛𓙜𓙝𓙞𓙟𓙠𓙡𓙢𓙣𓙤𓙥𓙦𓙧𓙨𓙩𓙪𓙫𓙬𓙭𓙮𓙯𓙰𓙱𓙲𓙳𓙴𓙵𓙶𓙷𓙸𓙹𓙺𓙻𓙼𓙽𓙾𓙿𓚀𓚁𓚂𓚃𓚄𓚅𓚆𓚇𓚈𓚉𓚊𓚋𓚌𓚍𓚎𓚏𓚐𓚑𓚒𓚓𓚔𓚕𓚖𓚗𓚘𓚙𓚚𓚛𓚜𓚝𓚞𓚟𓚠𓚡𓚢𓚣𓚤𓚥𓚦𓚧𓚨𓚩𓚪𓚫𓚬𓚭𓚮𓚯𓚰𓚱𓚲𓚳𓚴𓚵𓚶𓚷𓚸𓚹𓚺𓚻𓚼𓚽𓚾𓚿𓛀𓛁𓛂𓛃𓛄𓛅𓛆𓛇𓛈𓛉𓛊𓛋𓛌𓛍𓛎𓛏𓛐𓛑𓛒𓛓𓛔𓛕𓛖𓛗𓛘𓛙𓛚𓛛𓛜𓛝𓛞𓛟𓛠𓛡𓛢𓛣𓛤𓛥𓛦𓛧𓛨𓛩𓛪𓛫𓛬𓛭𓛮𓛯𓛰𓛱𓛲𓛳𓛴𓛵𓛶𓛷𓛸𓛹𓛺𓛻𓛼𓛽𓛾𓛿𓜀𓜁𓜂𓜃𓜄𓜅𓜆𓜇𓜈𓜉𓜊𓜋𓜌𓜍𓜎𓜏𓜐𓜑𓜒𓜓𓜔𓜕𓜖𓜗𓜘𓜙𓜚𓜛𓜜𓜝𓜞𓜟𓜠𓜡𓜢𓜣𓜤𓜥𓜦𓜧𓜨𓜩𓜪𓜫𓜬𓜭𓜮𓜯𓜰𓜱𓜲𓜳𓜴𓜵𓜶𓜷𓜸𓜹𓜺𓜻𓜼𓜽𓜾𓜿𓝀𓝁𓝂𓝃𓝄𓝅𓝆𓝇𓝈𓝉𓝊𓝋𓝌𓝍𓝎𓝏𓝐𓝑𓝒𓝓𓝔𓝕𓝖𓝗𓝘𓝙𓝚𓝛𓝜𓝝𓝞𓝟𓝠𓝡𓝢𓝣𓝤𓝥𓝦𓝧𓝨𓝩𓝪𓝫𓝬𓝭𓝮𓝯𓝰𓝱𓝲𓝳𓝴𓝵𓝶𓝷𓝸𓝹𓝺𓝻𓝼𓝽𓝾𓝿𓞀𓞁𓞂𓞃𓞄𓞅𓞆𓞇𓞈𓞉𓞊𓞋𓞌𓞍𓞎𓞏𓞐𓞑𓞒𓞓𓞔𓞕𓞖𓞗𓞘𓞙𓞚𓞛𓞜𓞝𓞞𓞟𓞠𓞡𓞢𓞣𓞤𓞥𓞦𓞧𓞨𓞩𓞪𓞫𓞬𓞭𓞮𓞯𓞰𓞱𓞲𓞳𓞴𓞵𓞶𓞷𓞸𓞹𓞺𓞻𓞼𓞽𓞾𓞿𓟀𓟁𓟂𓟃𓟄𓟅𓟆𓟇𓟈𓟉𓟊𓟋𓟌𓟍𓟎𓟏𓟐𓟑𓟒𓟓𓟔𓟕𓟖𓟗𓟘𓟙𓟚𓟛𓟜𓟝𓟞𓟟𓟠𓟡𓟢𓟣𓟤𓟥𓟦𓟧𓟨𓟩𓟪𓟫𓟬𓟭𓟮𓟯𓟰𓟱𓟲𓟳𓟴𓟵𓟶𓟷𓟸𓟹𓟺𓟻𓟼𓟽𓟾𓟿𓠀𓠁𓠂𓠃𓠄𓠅𓠆𓠇𓠈𓠉𓠊𓠋𓠌𓠍𓠎𓠏𓠐𓠑𓠒𓠓𓠔𓠕𓠖𓠗𓠘𓠙𓠚𓠛𓠜𓠝𓠞𓠟𓠠𓠡𓠢𓠣𓠤𓠥𓠦𓠧𓠨𓠩𓠪𓠫𓠬𓠭𓠮𓠯𓠰𓠱𓠲𓠳𓠴𓠵𓠶𓠷𓠸𓠹𓠺𓠻𓠼𓠽𓠾𓠿𓡀𓡁𓡂𓡃𓡄𓡅𓡆𓡇𓡈𓡉𓡊𓡋𓡌𓡍𓡎𓡏𓡐𓡑𓡒𓡓𓡔𓡕𓡖𓡗𓡘𓡙𓡚𓡛𓡜𓡝𓡞𓡟𓡠𓡡𓡢𓡣𓡤𓡥𓡦𓡧𓡨𓡩𓡪𓡫𓡬𓡭𓡮𓡯𓡰𓡱𓡲𓡳𓡴𓡵𓡶𓡷𓡸𓡹𓡺𓡻𓡼𓡽𓡾𓡿𓢀𓢁𓢂𓢃𓢄𓢅𓢆𓢇𓢈𓢉𓢊𓢋𓢌𓢍𓢎𓢏𓢐𓢑𓢒𓢓𓢔𓢕𓢖𓢗𓢘𓢙𓢚𓢛𓢜𓢝𓢞𓢟𓢠𓢡𓢢𓢣𓢤𓢥𓢦𓢧𓢨𓢩𓢪𓢫𓢬𓢭𓢮𓢯𓢰𓢱𓢲𓢳𓢴𓢵𓢶𓢷𓢸𓢹𓢺𓢻𓢼𓢽𓢾𓢿𓣀𓣁𓣂𓣃𓣄𓣅𓣆𓣇𓣈𓣉𓣊𓣋𓣌𓣍𓣎𓣏𓣐𓣑𓣒𓣓𓣔𓣕𓣖𓣗𓣘𓣙𓣚𓣛𓣜𓣝𓣞𓣟𓣠𓣡𓣢𓣣𓣤𓣥𓣦𓣧𓣨𓣩𓣪𓣫𓣬𓣭𓣮𓣯𓣰𓣱𓣲𓣳𓣴𓣵𓣶𓣷𓣸𓣹𓣺𓣻𓣼𓣽𓣾𓣿𓤀𓤁𓤂𓤃𓤄𓤅𓤆𓤇𓤈𓤉𓤊𓤋𓤌𓤍𓤎𓤏𓤐𓤑𓤒𓤓𓤔𓤕𓤖𓤗𓤘𓤙𓤚𓤛𓤜𓤝𓤞𓤟𓤠𓤡𓤢𓤣𓤤𓤥𓤦𓤧𓤨𓤩𓤪𓤫𓤬𓤭𓤮𓤯𓤰𓤱𓤲𓤳𓤴𓤵𓤶𓤷𓤸𓤹𓤺𓤻𓤼𓤽𓤾𓤿𓥀𓥁𓥂𓥃𓥄𓥅𓥆𓥇𓥈𓥉𓥊𓥋𓥌𓥍𓥎𓥏𓥐𓥑𓥒𓥓𓥔𓥕𓥖𓥗𓥘𓥙𓥚𓥛𓥜𓥝𓥞𓥟𓥠𓥡𓥢𓥣𓥤𓥥𓥦𓥧𓥨𓥩𓥪𓥫𓥬𓥭𓥮𓥯𓥰𓥱𓥲𓥳𓥴𓥵𓥶𓥷𓥸𓥹𓥺𓥻𓥼𓥽𓥾𓥿𓦀𓦁𓦂𓦃𓦄𓦅𓦆𓦇𓦈𓦉𓦊𓦋𓦌𓦍𓦎𓦏𓦐𓦑𓦒𓦓𓦔𓦕𓦖𓦗𓦘𓦙𓦚𓦛𓦜𓦝𓦞𓦟𓦠𓦡𓦢𓦣𓦤𓦥𓦦𓦧𓦨𓦩𓦪𓦫𓦬𓦭𓦮𓦯𓦰𓦱𓦲𓦳𓦴𓦵𓦶𓦷𓦸𓦹𓦺𓦻𓦼𓦽𓦾𓦿𓧀𓧁𓧂𓧃𓧄𓧅𓧆𓧇𓧈𓧉𓧊𓧋𓧌𓧍𓧎𓧏𓧐𓧑𓧒𓧓𓧔𓧕𓧖𓧗𓧘𓧙𓧚𓧛𓧜𓧝𓧞𓧟𓧠𓧡𓧢𓧣𓧤𓧥𓧦𓧧𓧨𓧩𓧪𓧫𓧬𓧭𓧮𓧯𓧰𓧱𓧲𓧳𓧴𓧵𓧶𓧷𓧸𓧹𓧺𓧻𓧼𓧽𓧾𓧿𓨀𓨁𓨂𓨃𓨄𓨅𓨆𓨇𓨈𓨉𓨊𓨋𓨌𓨍𓨎𓨏𓨐𓨑𓨒𓨓𓨔𓨕𓨖𓨗𓨘𓨙𓨚𓨛𓨜𓨝𓨞𓨟𓨠𓨡𓨢𓨣𓨤𓨥𓨦𓨧𓨨𓨩𓨪𓨫𓨬𓨭𓨮𓨯𓨰𓨱𓨲𓨳𓨴𓨵𓨶𓨷𓨸𓨹𓨺𓨻𓨼𓨽𓨾𓨿𓩀𓩁𓩂𓩃𓩄𓩅𓩆𓩇𓩈𓩉𓩊𓩋𓩌𓩍𓩎𓩏𓩐𓩑𓩒𓩓𓩔𓩕𓩖𓩗𓩘𓩙𓩚𓩛𓩜𓩝𓩞𓩟𓩠𓩡𓩢𓩣𓩤𓩥𓩦𓩧𓩨𓩩𓩪𓩫𓩬𓩭𓩮𓩯𓩰𓩱𓩲𓩳𓩴𓩵𓩶𓩷𓩸𓩹𓩺𓩻𓩼𓩽𓩾𓩿𓪀𓪁𓪂𓪃𓪄𓪅𓪆𓪇𓪈𓪉𓪊𓪋𓪌𓪍𓪎𓪏𓪐𓪑𓪒𓪓𓪔𓪕𓪖𓪗𓪘𓪙𓪚𓪛𓪜𓪝𓪞𓪟𓪠𓪡𓪢𓪣𓪤𓪥𓪦𓪧𓪨𓪩𓪪𓪫𓪬𓪭𓪮𓪯𓪰𓪱𓪲𓪳𓪴𓪵𓪶𓪷𓪸𓪹𓪺𓪻𓪼𓪽𓪾𓪿𓫀𓫁𓫂𓫃𓫄𓫅𓫆𓫇𓫈𓫉𓫊𓫋𓫌𓫍𓫎𓫏𓫐𓫑𓫒𓫓𓫔𓫕𓫖𓫗𓫘𓫙𓫚𓫛𓫜𓫝𓫞𓫟𓫠𓫡𓫢𓫣𓫤𓫥𓫦𓫧𓫨𓫩𓫪𓫫𓫬𓫭𓫮𓫯𓫰𓫱𓫲𓫳𓫴𓫵𓫶𓫷𓫸𓫹𓫺𓫻𓫼𓫽𓫾𓫿𓬀𓬁𓬂𓬃𓬄𓬅𓬆𓬇𓬈𓬉𓬊𓬋𓬌𓬍𓬎𓬏𓬐𓬑𓬒𓬓𓬔𓬕𓬖𓬗𓬘𓬙𓬚𓬛𓬜𓬝𓬞𓬟𓬠𓬡𓬢𓬣𓬤𓬥𓬦𓬧𓬨𓬩𓬪𓬫𓬬𓬭𓬮𓬯𓬰𓬱𓬲𓬳𓬴𓬵𓬶𓬷𓬸𓬹𓬺𓬻𓬼𓬽𓬾𓬿𓭀𓭁𓭂𓭃𓭄𓭅𓭆𓭇𓭈𓭉𓭊𓭋𓭌𓭍𓭎𓭏𓭐𓭑𓭒𓭓𓭔𓭕𓭖𓭗𓭘𓭙𓭚𓭛𓭜𓭝𓭞𓭟𓭠𓭡𓭢𓭣𓭤𓭥𓭦𓭧𓭨𓭩𓭪𓭫𓭬𓭭𓭮𓭯𓭰𓭱𓭲𓭳𓭴𓭵𓭶

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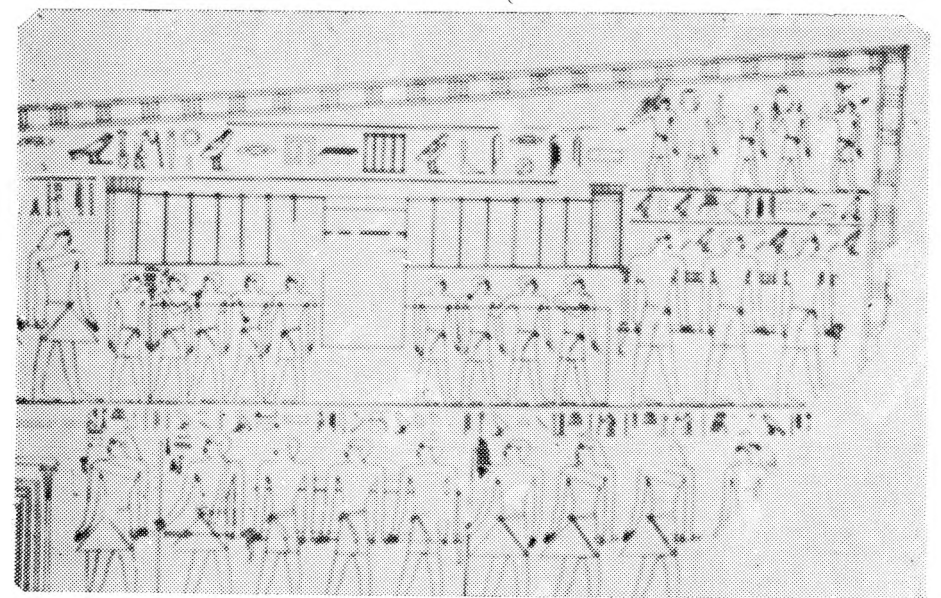


- a) Mereruka.
- b) Kar
- c) Idw

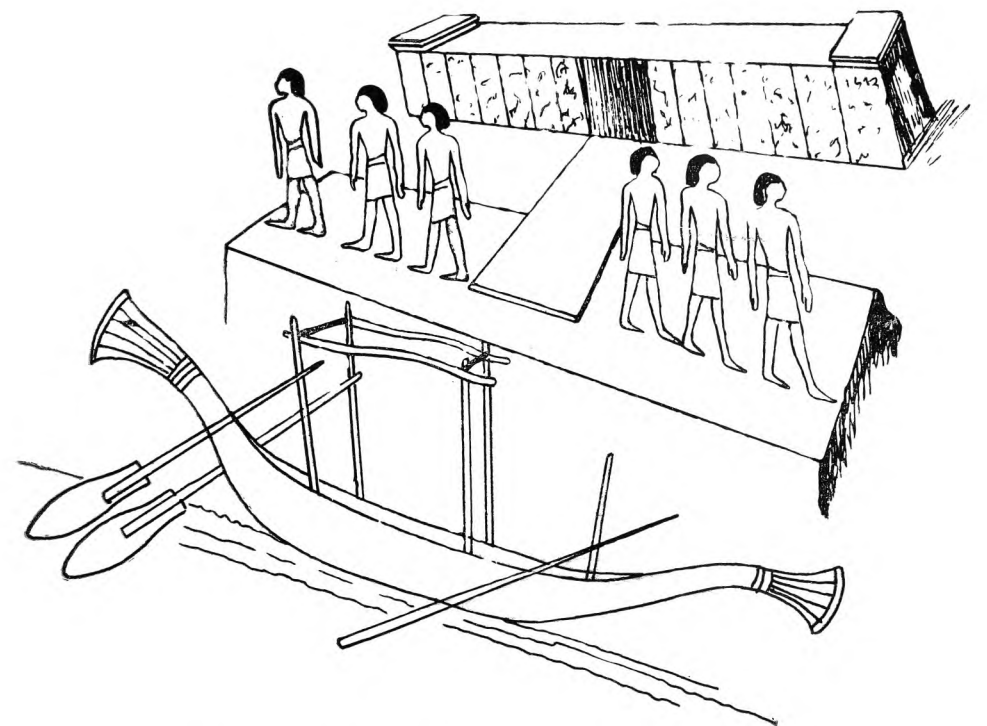




2. The Purification Tent of Idw (reconstruction).

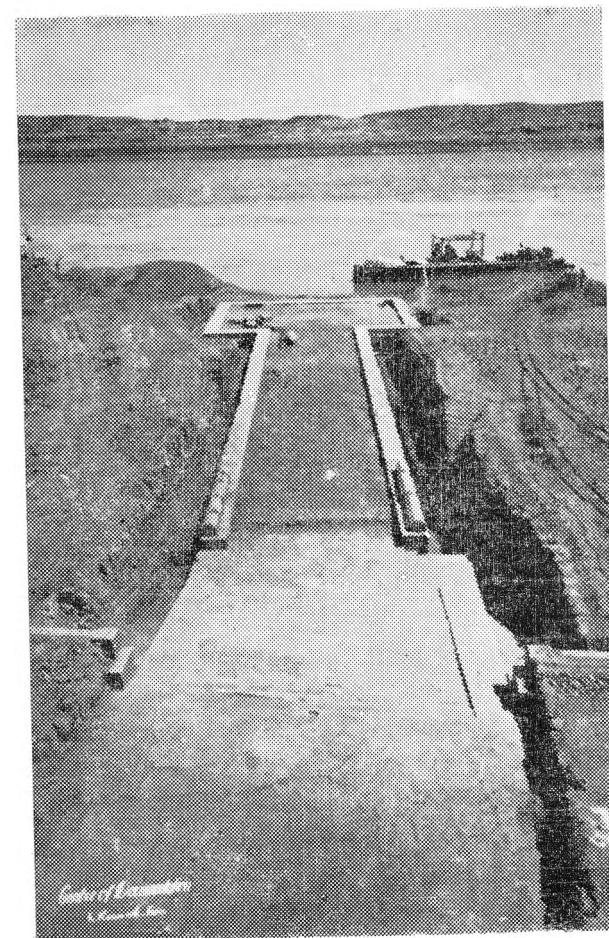


3. The purification tent (Meir)



4. The purification Tent (a reconstruction) see fig. 3.





5. causeway of the Temple of Kalabsha

## THE ARCHAIC TOMBS AT TURA EL-ASMANT

By

FOAD YACOB

The excavations which took place inside the enclosure of the cement factory at Tûra in 1965 and 1966 led to the discovery of more than 1500 tombs dated to different periods, (from the Archaic till the Graeco-Roman period). More than 200 tombs were dating from the Archaic period. Most of the graves discovered were found plundered and the bones disturbed.

The archaic burials can be divided into the following classes:—

1. An oval or oblong pit with rounded corners, cut in the gravel (PLS., I & II), in some cases the pit is lined with mud-brick or limestone. The orientation of the pit is usually North-South, and the size varies between 85-160 cm. in length, 50-125 cm. in width and 30-150 cm. in depth.

The funerary equipment, such as pottery, stone vessels, flint tools, and toilet implements, were placed either at the hands, feet or the head of the deceased. However, in some cases, particularly in rich burials, the funerary equipment was placed around the body.

2. An open pit with side chamber (lateral niche). The size of the pit varies between 90-135 cm. long, 80-110 cm. wide, and 125-350 cm. deep. The entrance to the burial chamber is usually blocked with a wall of mud-brick and, in some cases, blocked with stones. The burial chamber is usually cut in the west wall of the pit, but sometimes it is cut in the east wall. (see pls III, IV, V.).

3. Rectangular tomb with two compartments: burial chamber and a magazine. The latter lies either at the southern or northern end of the burial-chamber. In the magazine some of the funerary objects, especially pottery jars are kept (Pl. VI). The walls of the burial chamber are in some cases lined with mud-brick (see pl. VII), or limestone (I) (see pl. VIII). The measurements of the burial chamber varies between 90X55 cm. and 200X130 cm. and the depth is between 60 and 130 cm. The size of the magazine varies between 70X25 cm. and 135X85 cm. and the depth between 60 and 130 cm.

The wall between the burial chamber and the magazine is in some cases of limestone. It is usually between 10 and 15 cm. in thickness.

4. Rectangular brick-tomb with three compartments: burial-chamber and two magazines, paired at one end either to the north (see pls. IX & X) or to the south (see pls. XI & XII) of the burial-chamber (Pl. XIII). The tombs are orientated N.-S. The size of the burial-chamber varies

between 120X90 cm. and 140X110 cm, and the depth is between 80 and 85 cm. the wall between the burial-chamber and the two magazines varies between 15 and 30 cm. in thickness. The measurements of the magazines vary between 40X30 cm. and 65X40 cm., and the depth is between 65 and 85 cm.

5. A stairway of mud-brick leading down to the burial-chamber. In order to prevent plundering, a portcullis blocking had been placed before the entrance of the burial-chamber (see pls. XIV, XV, XVI). Most of the large tombs have more than one portcullis blocking and sometimes a wall of mud-brick can also be found (see pl. XVII). The portcullis varies between 200-240 cm. in height, 115-150 cm. in width, and 18 cm. in thickness. The burial-chamber is roughly orientated N.-S. The size varies between 170X150 cm-400X250 cm. and the depth is between 115-380 cm.

The walls of the burial-chamber are usually of mud-brick. In some cases they are lined with slabs of limestone and floored with limestone (see pl. XVIII). The burial-chamber was probably roofed with timber; the stairway in tomb No. 130 (Season VIII) was roofed with slabs of limestone (see pl. XIX).

This type of tombs was found completely plundered, except from some jars of pottery most of which were broken.

6. A Stairway of mud-brick leading down to the burial-chamber. A wall of mud-brick before the stairway was found, as well as another wall before the burial-chamber itself. A magazine was also built on each side at the end of the stairway (see pl. XX).

The size of the burial chamber is 216X145 cm. and 70 cm. deep. The size of the magazines varies between 110X50 cm. and 110X65 cm. and they are 70 cm. in depth. No funerary equipment was found in the tomb except some Jars of pottery in the magazines (Pl. XXI).

#### Burial Customs :

The position of the body is usually contracted and lies on the left side. The head is either to the north, facing the east or to the south, facing the west. The body rarely lies on the right side. In such cases the head is either to the north, facing west, or to the south, facing east (see pls. I & II, IV). The body was sometimes wrapped in a mat or placed in a wooden coffin, the remains of which were found in some graves.

#### Contents of the tombs :

The burial-chamber was the principal room in the tomb. It contained the funerary equipment necessary for the deceased, such as:

1. **The pottery Vessels :** The pottery vessels which were found are of different kinds, such as big jars with tapering bodies and rounded bases (wine jars);

Ovoid and cylindrical jars, dishes, bowls, and plates (see Pls. XXI & XXII, and (Pl. XXIII). Some jars contained charred emmer-wheat. Some of the jars were sealed with uninscribed conical-shaped clay sealings.

Not marks were usually engraved with a sharp instrument on the wine jars (see pl. XXIV).

2. **Stone Vessels:** Stone vessels of different shapes and materials, such as alabaster, marble, schist, limestone, and gypsum were also found (Pls. XXV & XXVI) and (pl. XXVII).
3. **Ivory and bone :** Some objects of ivory and bone were found with the deceased such as kohl-sticks, hair-pins, castanets, gaming-pieces of ivory, and an object in the form of the sign w3s (see Pl. XXVIII).
4. **Flint Tools:** Knives, saws and scrapers (Pl. XXVIII).

#### MISCELLANEOUS OBJECTS

- a) a circular toilet receptacle of schist (lid lost) containing remains of yellow Ochre (T. VIII 506) (Pl. XXIX 4).
- b) A small shell containing a brown paint, probably a sort of "Kohl" (T. VIII 506) (Pl. XXIX 1,4).
- c) Rectangular Slate palettes. (Pl. XXIX 1, 2).
- d) A model of two granaries of unbaked clay. (Pl. XXIX,1).
- e) The most attractive thing found with the deceased, is an object of pottery, probably a lamp (T. IX 62) (see Pl. XXIX, 3).
- f) Beads of faience, carnelian, and steatite of different shapes (Pl. XXIX, 5).

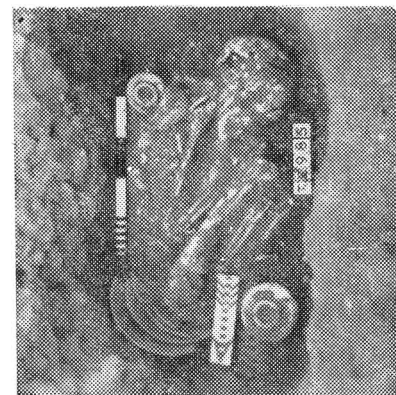
Foad Yacoub

#### FOOTNOTES

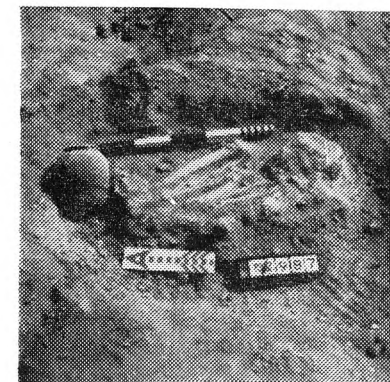
1. Tomb No. 31, season 9.

The tomb was roofed with limestone slabs, and the flooring was also of limestone. It has a stairway of three steps at the southern end of the tomb, leading down to a magazine. Two steps of mud-brick and the third one of limestone.

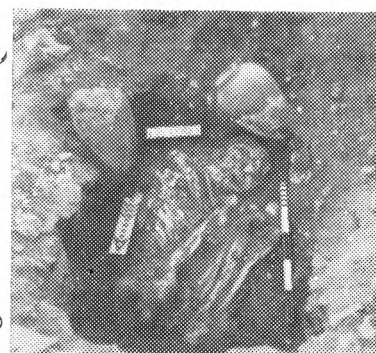




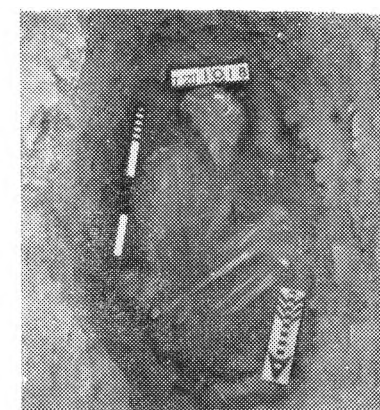
T VII 985



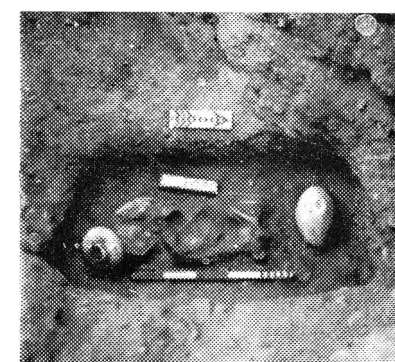
T. VII 987



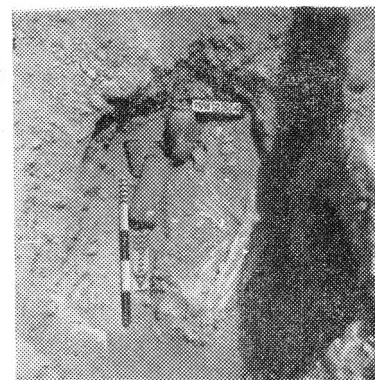
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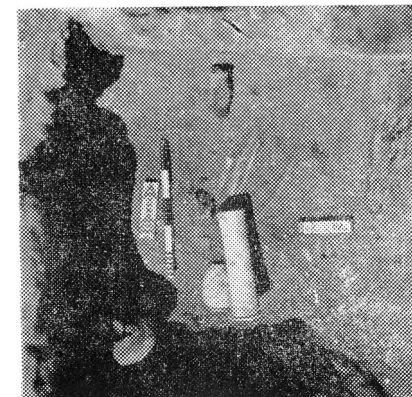
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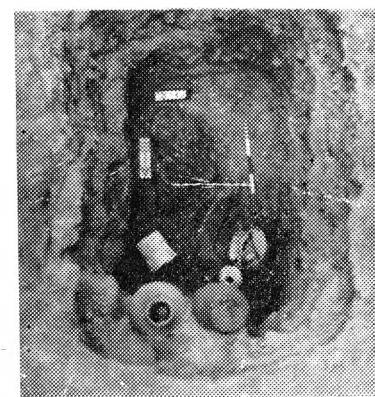
T. VII 1070  
Contracted Burials



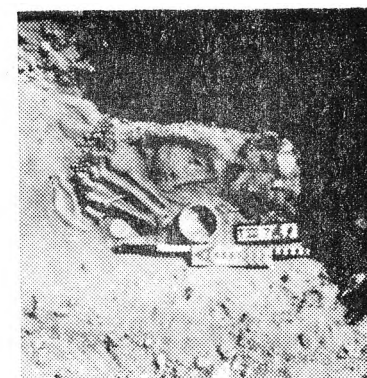
. VIII 254



T. VIII 509

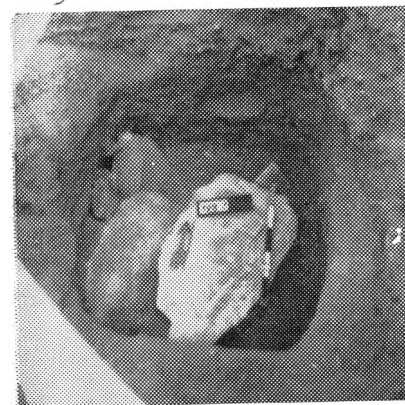


T. VIII 742

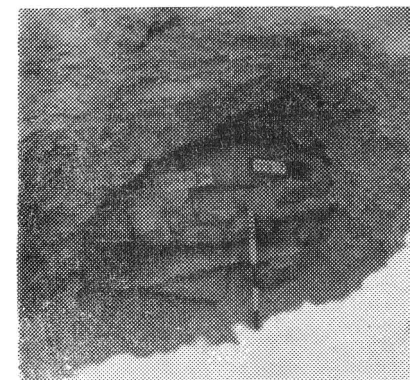


T. VIII 761

Contracted Burials



1. The entrance to the burial  
chamber blocked with stones  
T. VIII 7

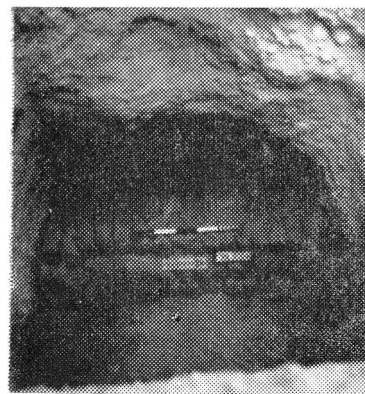


2. The entrance to the burial  
chamber, blocked with mud-  
brick.  
T. VIII 7

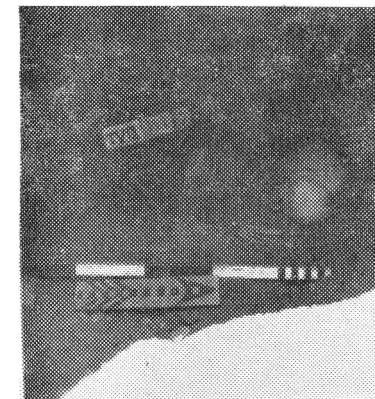


3. The side burial chamber  
containing the skeleton  
T. VIII 7

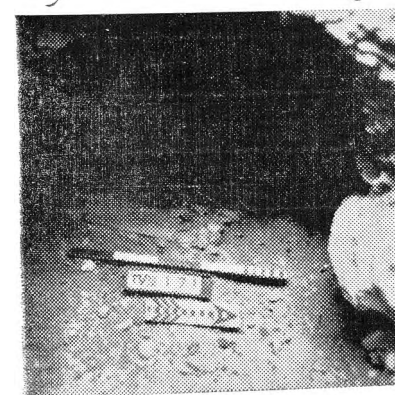




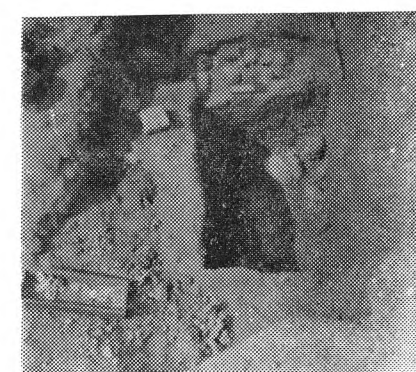
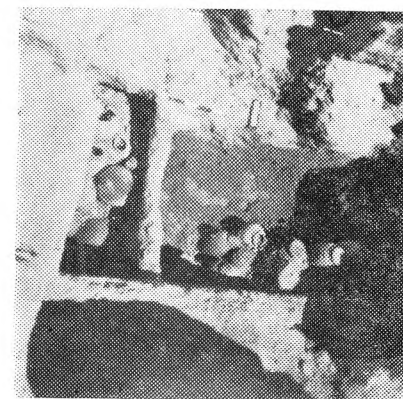
1. The entrance to the burial  
chamber blocked with mudbrick  
T. VIII 114



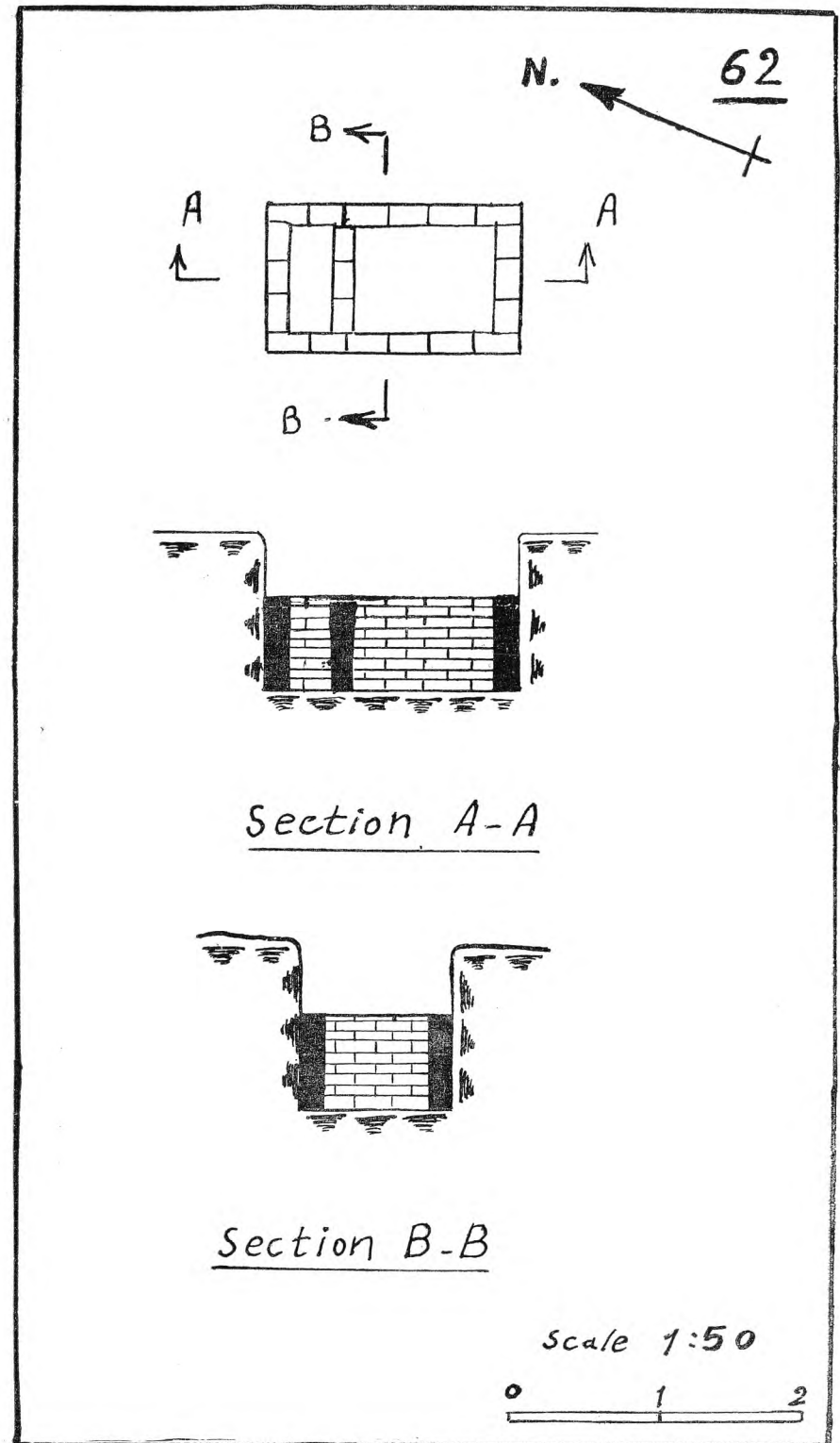
2. The burial chamber containing  
the deceased  
T. VIII 117



3. The burial chamber containing  
remains of the skeleton  
T. VIII 171

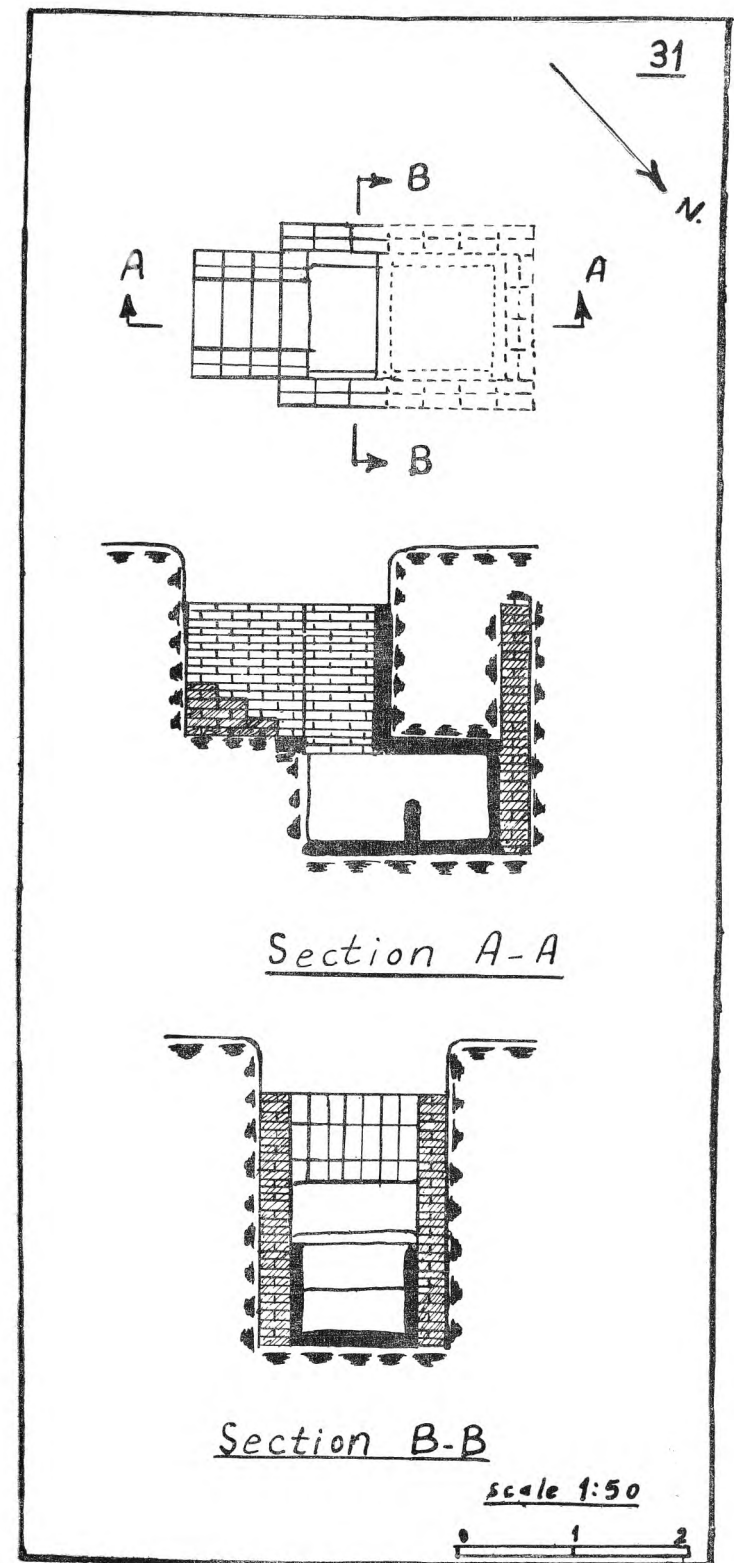


Tombs with two compartments.

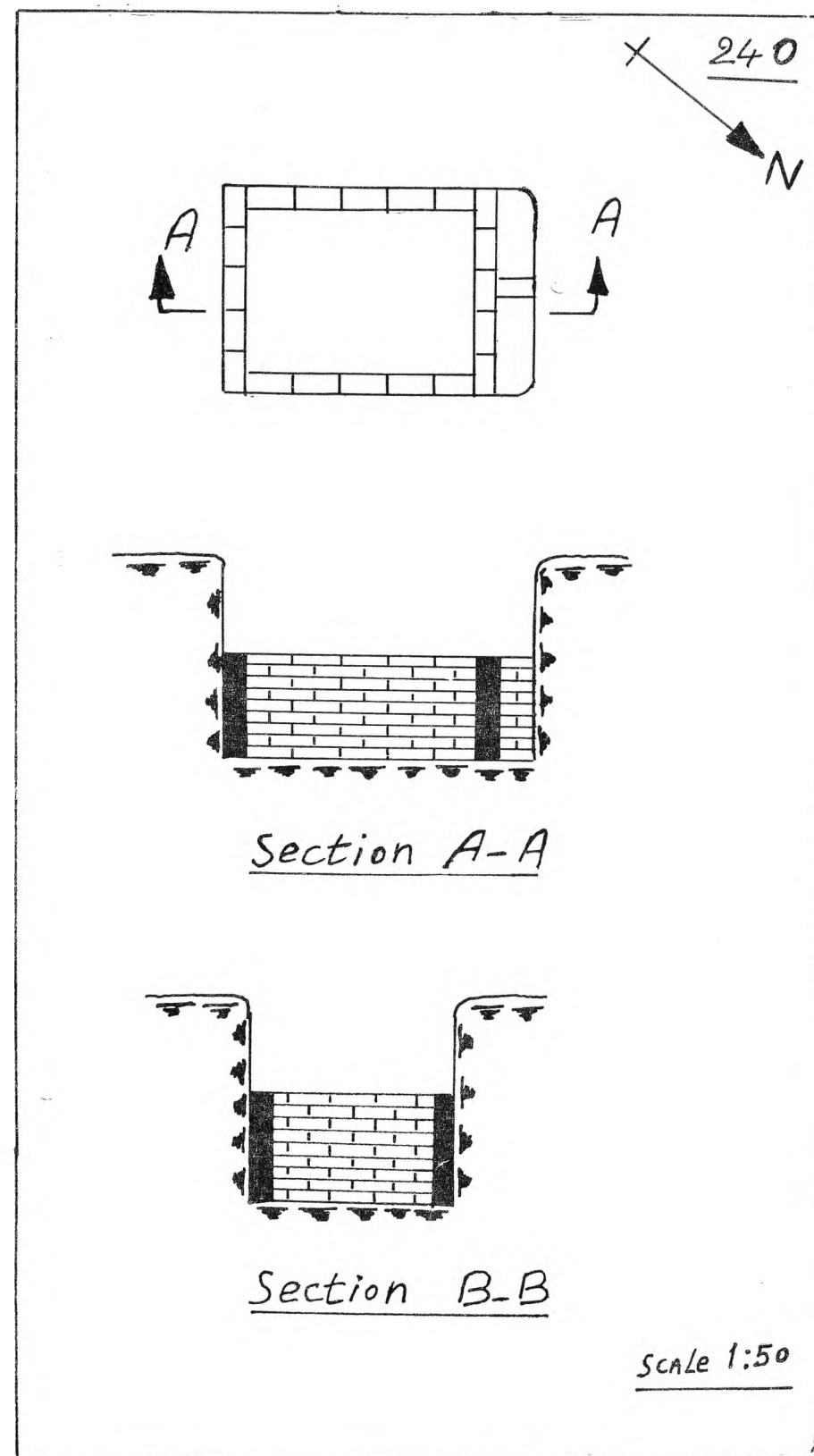


Tomb No. 62 lined with mudbrick.

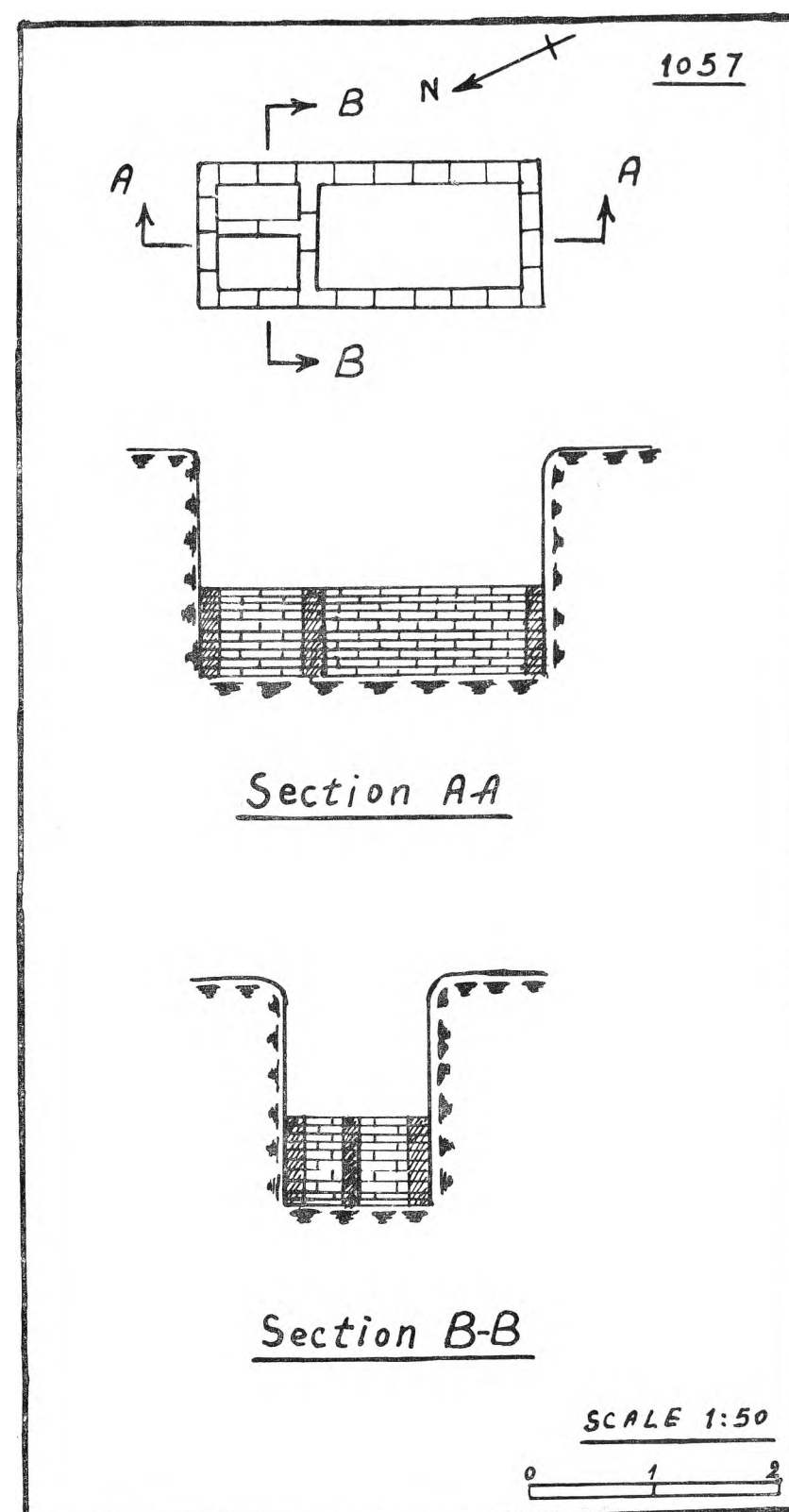




Tomb No. 31 : The burial chamber lined with limestone.

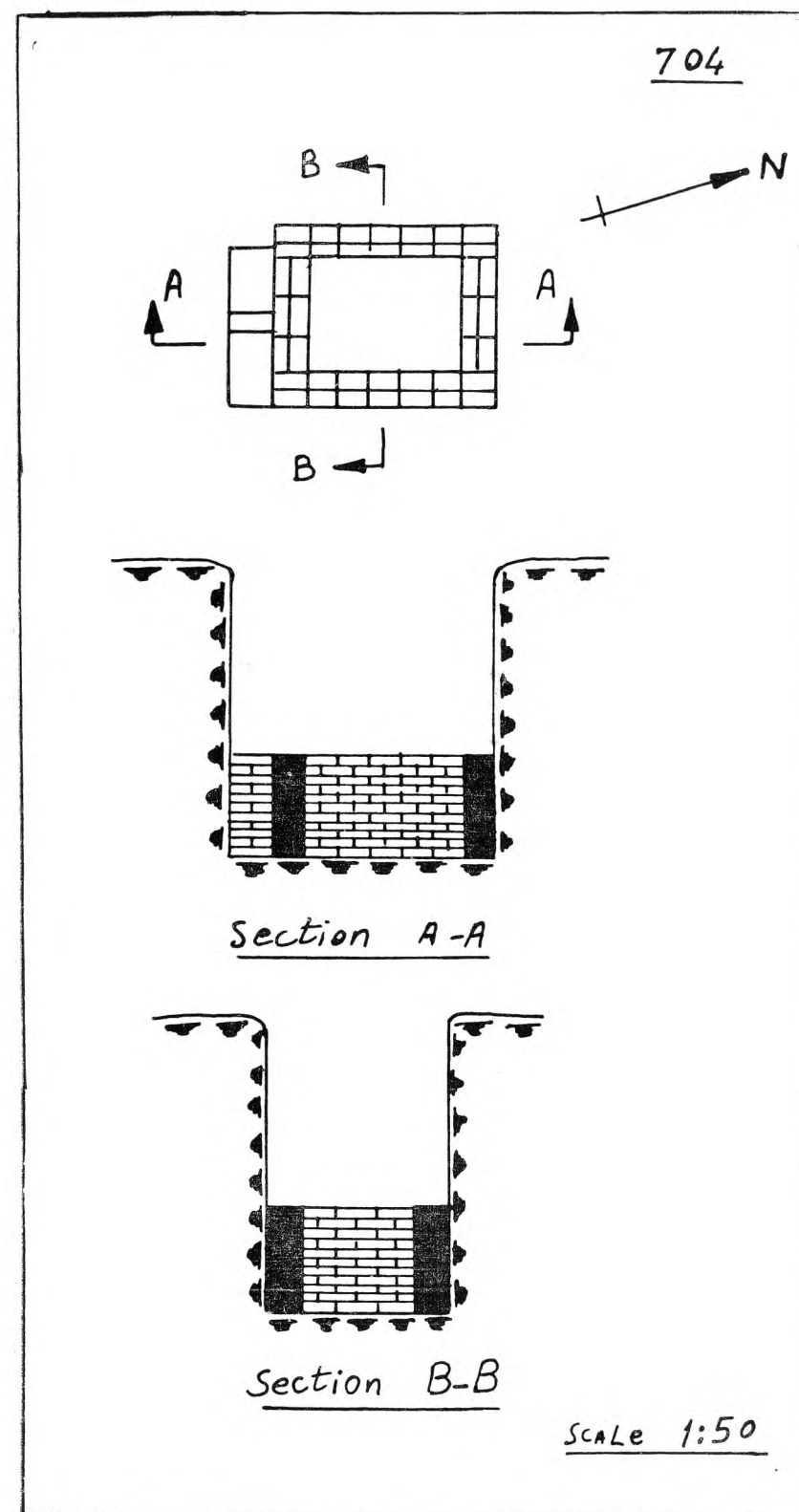


Tomb No 240 : A tomb with three compartments and magazines to the north.



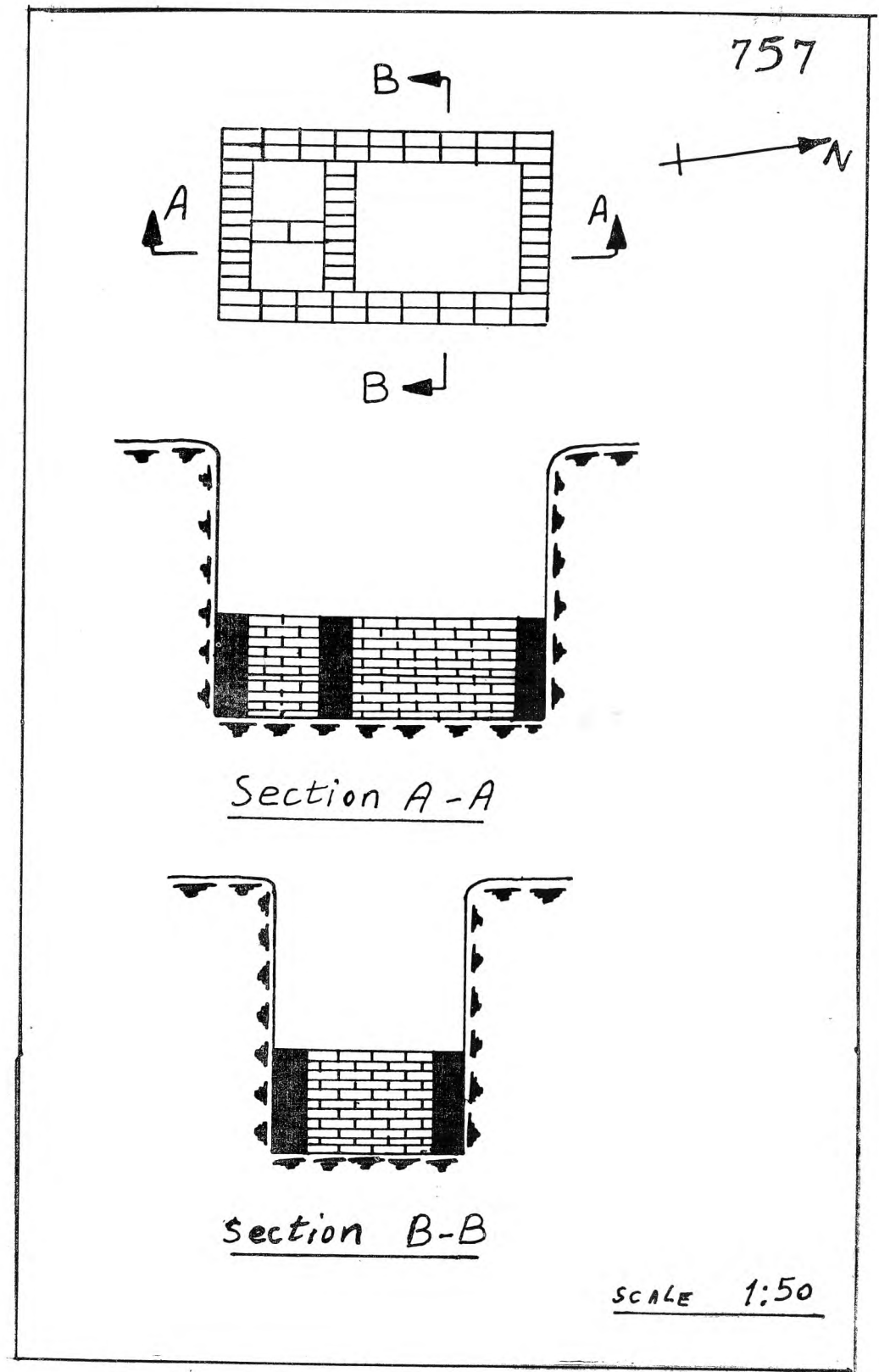
Tomb No. 1057 : A tomb with there compartments,  
and two magazines to the north.



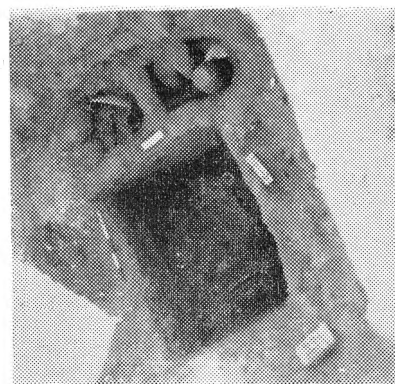


Tomb No 704 with the magazines to the South.

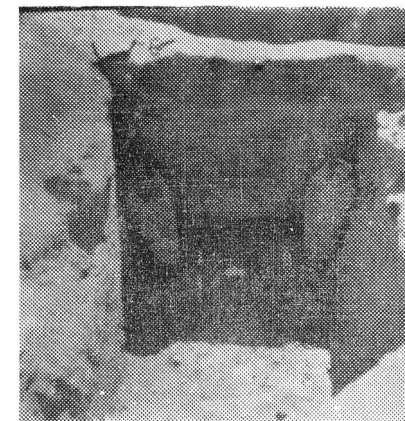
757



Tomb No. 757 with the magazines to the south.



1. The burial chamber  
and two magazines  
(T. VIII 704).

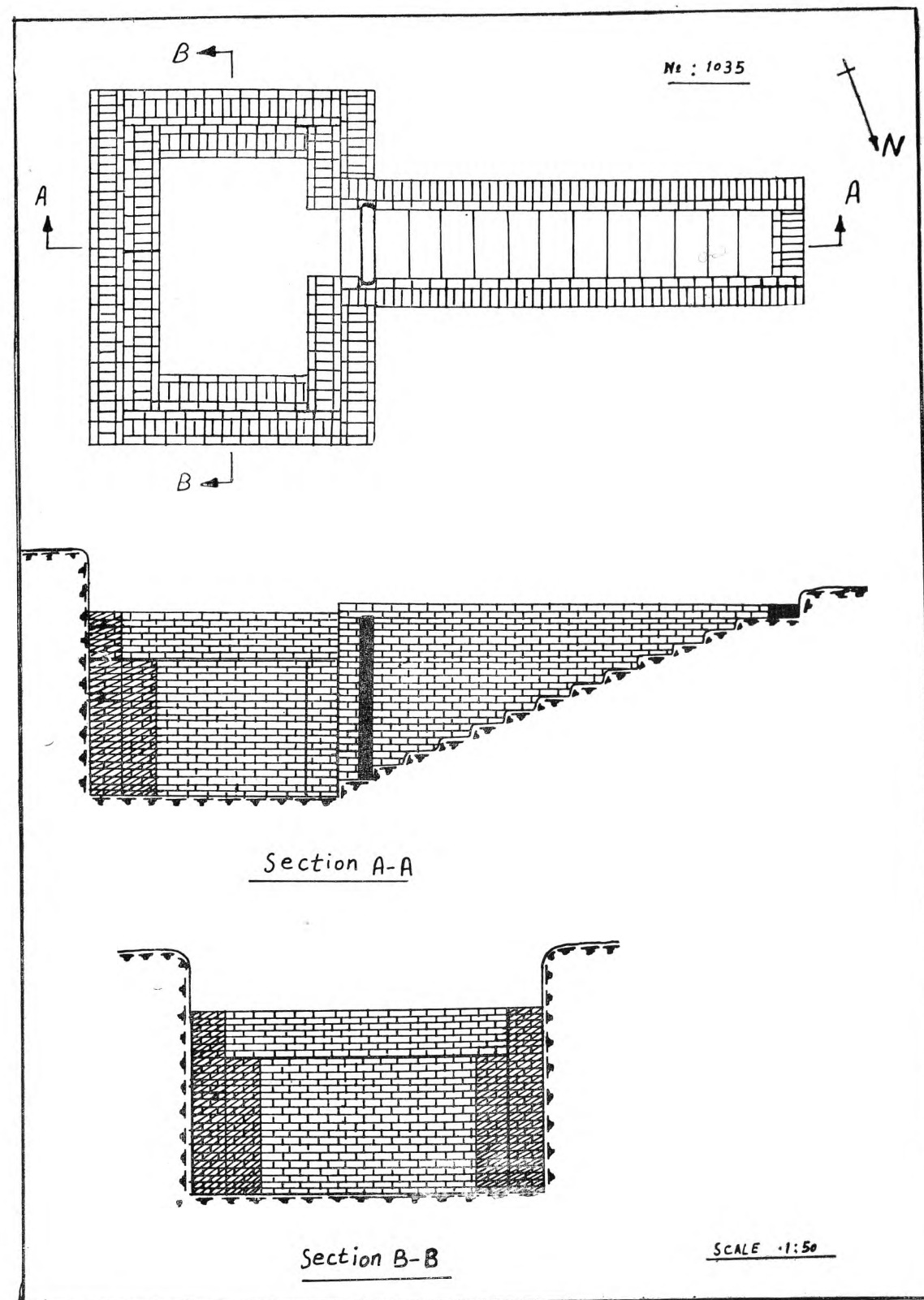


2. The burial chamber  
and two magazines  
(T. VIII 240)



3. The burial chamber and  
two magazines  
(T. VIII 750)





Tomb No. 1035 with a stairway of mud-brick leading down to the burial chamber.



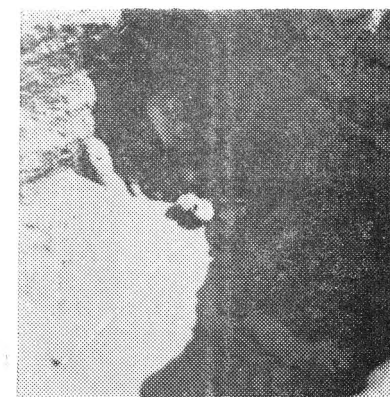
1. A stairway of mudbrick leading down to the burial chamber.  
(T. VII 1035).



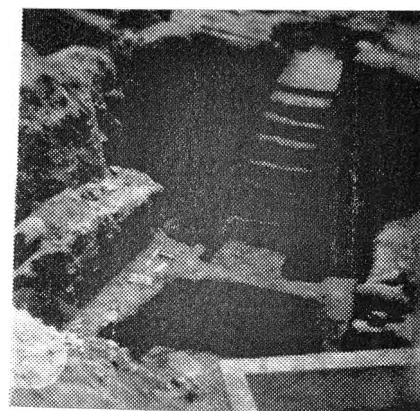
2. A limestone porteullis blocking in front of the entrance of the burial chamber.  
T. VII. 1035.



3. The burial chamber and the porteullis blocking  
(T. VII 1035).



4. Some of the pottery vessels in the burial chamber  
(T. VII 1056).

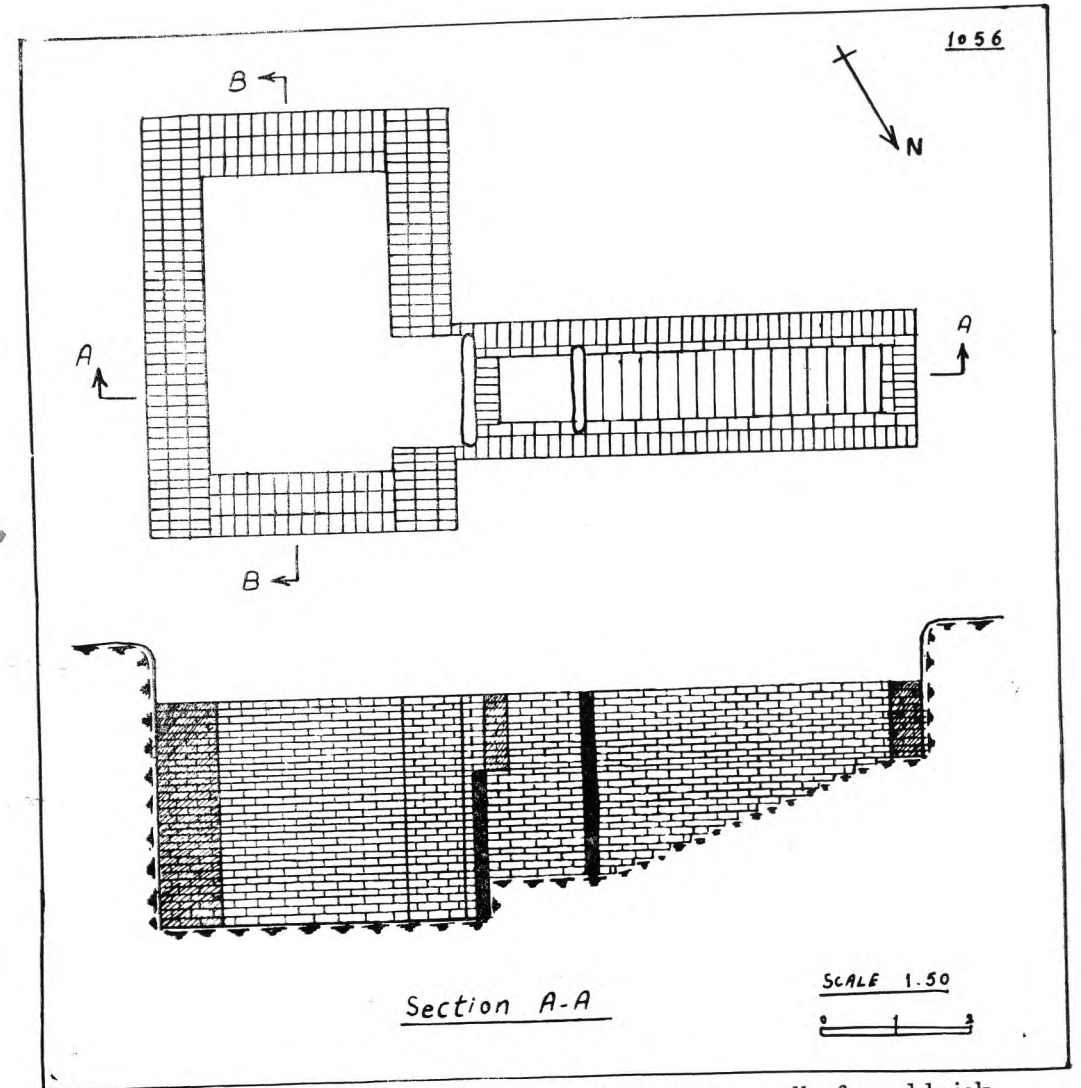


1. The stairway leading down to  
the burial chamber  
(T. VII. 986).

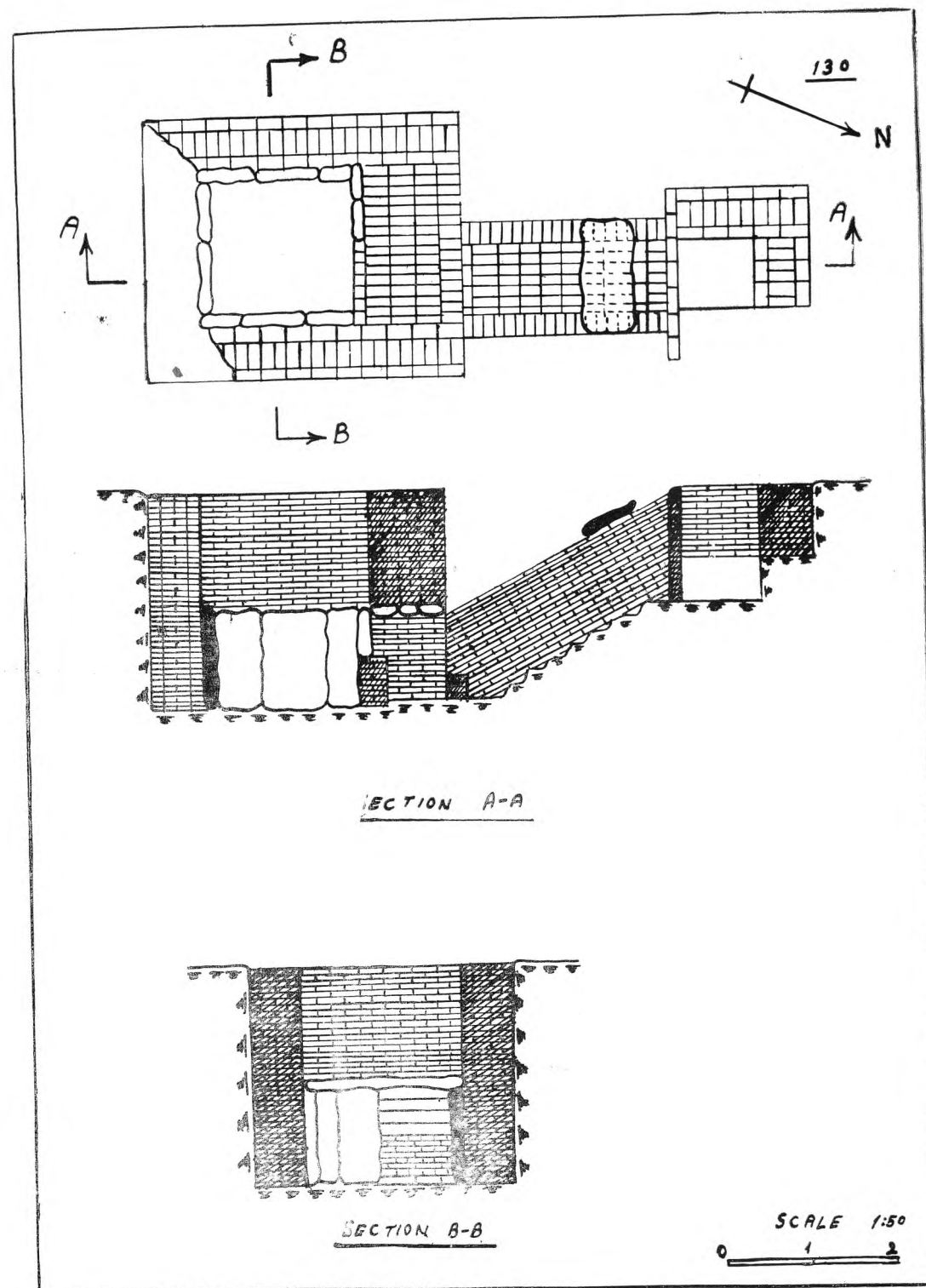


2. The stairway and the two  
magazines  
(T. VII. 986).





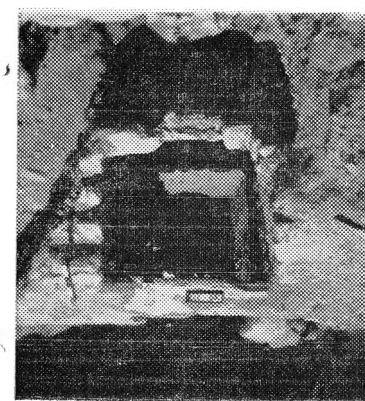
Tomb No. 1056 with portcullis blockings and a wall of mud-brick.



Tomb No. 130 with mud-brick walls lined with slabs of limestone and floored with limestone.

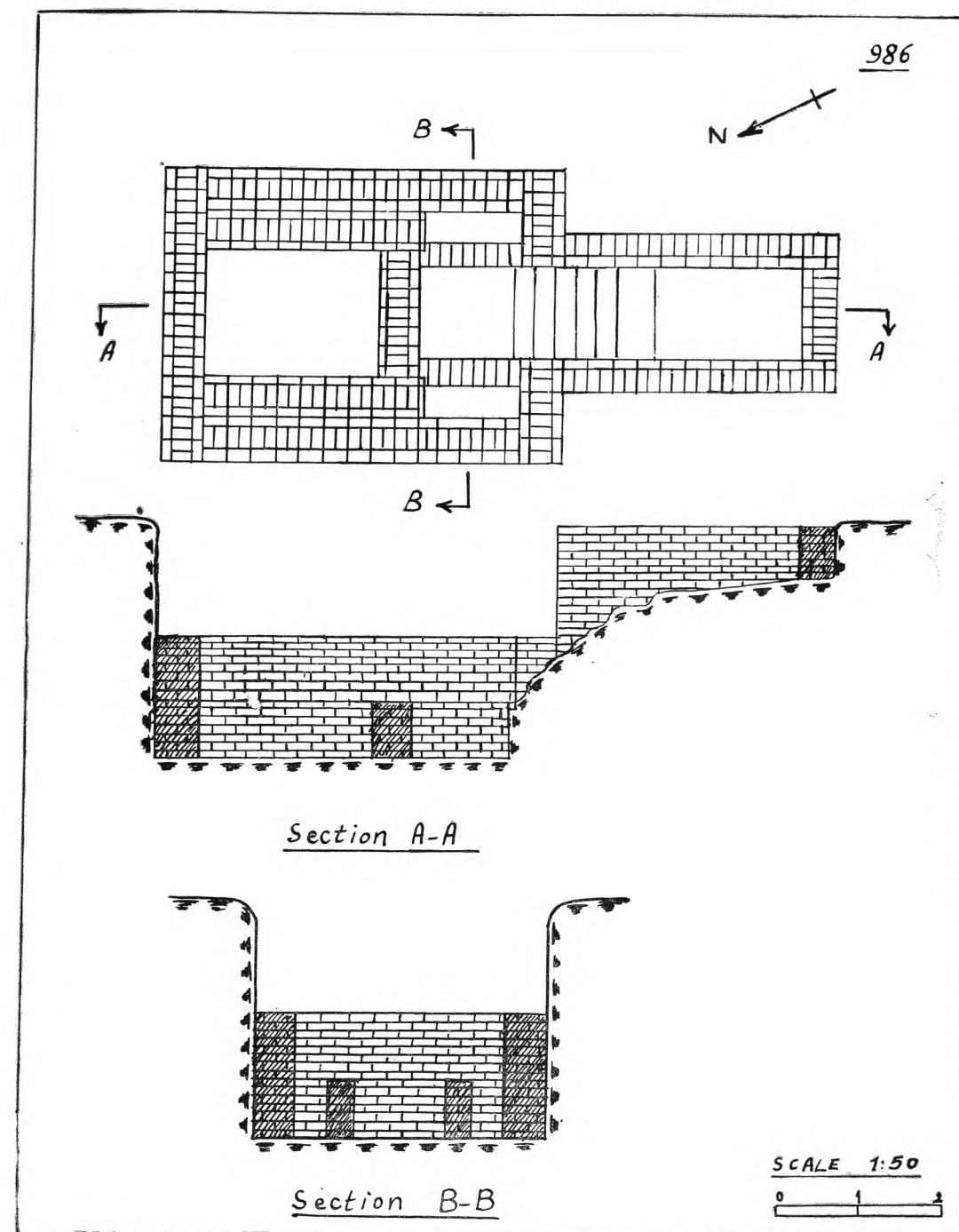


1. The entrance to the burial chamber blocked with mudbrick  
(T. VIII. 130).

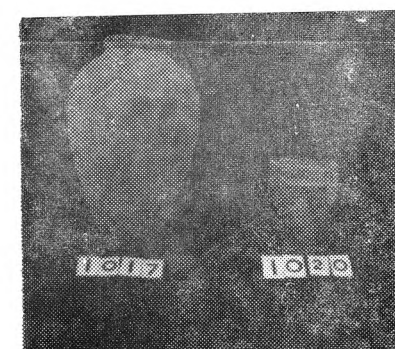
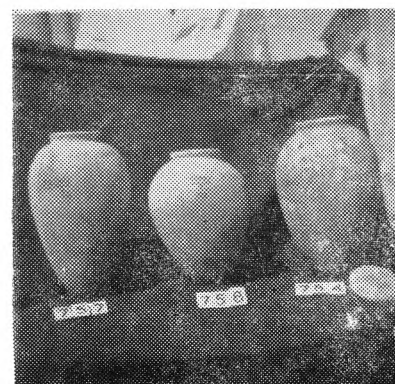
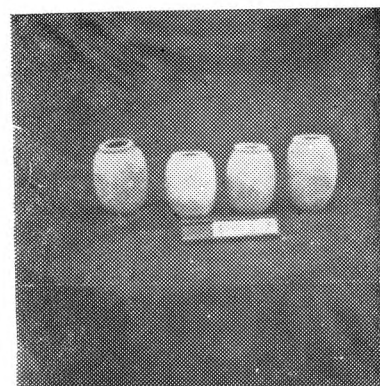


2. The walls of the burial chamber lined with limestone slabs  
(T. VIII. 130).

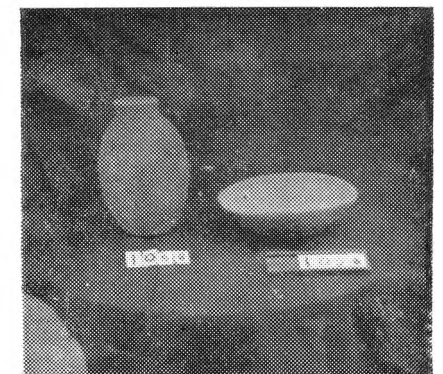
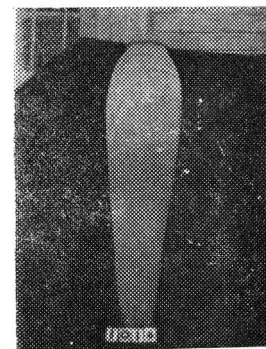
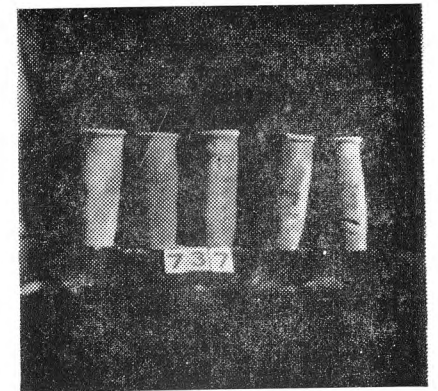
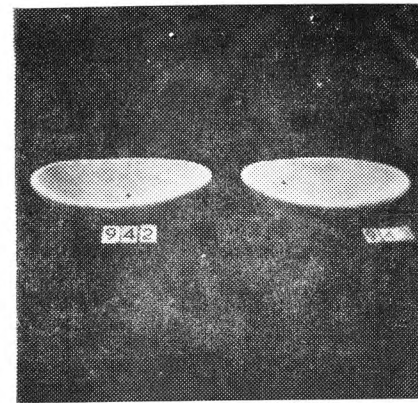




Tomb No. 986 with a mud-brick wall before the stairway and a magazine on each side at the end of the stairway.

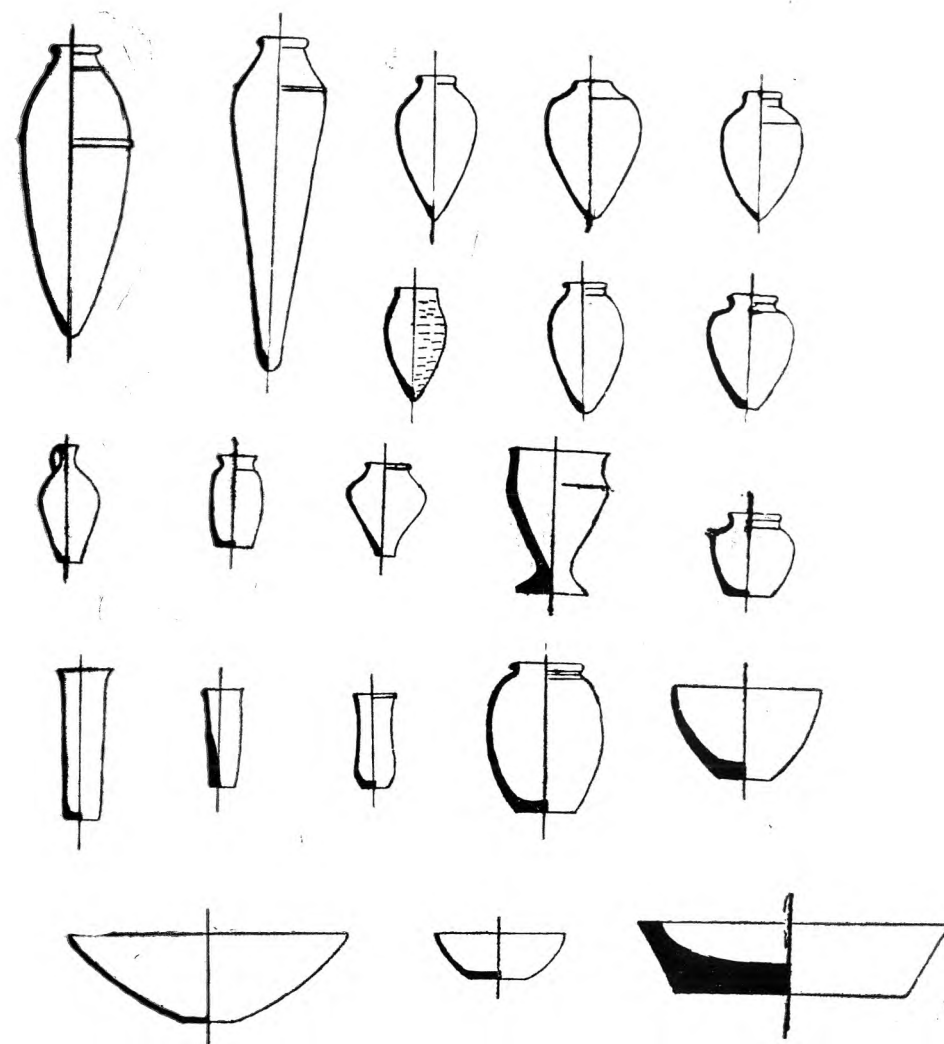


Some of the discovered pottery vessels

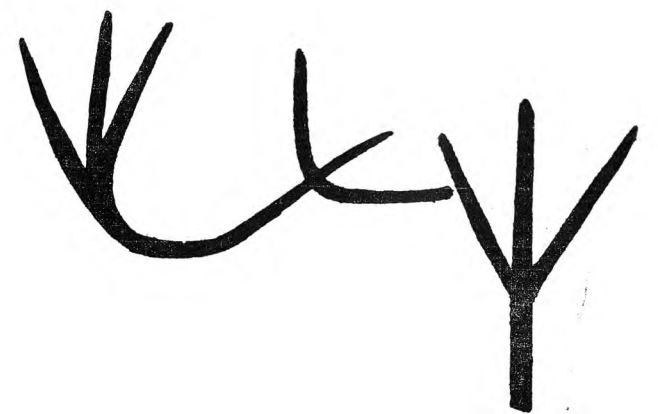
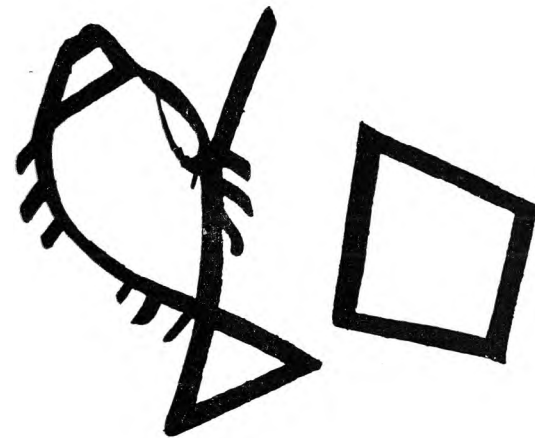
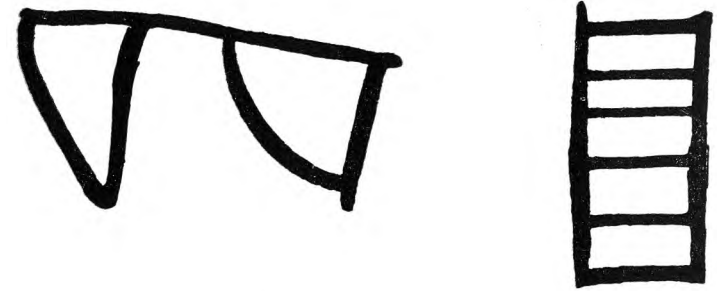


Some pottery vessels

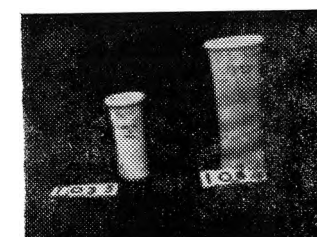
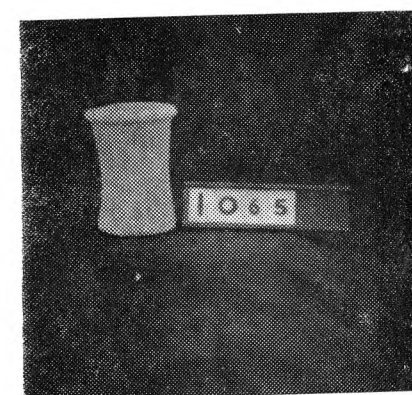
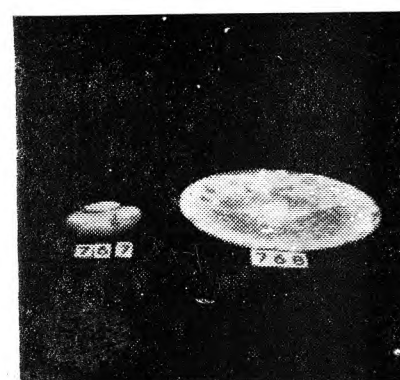
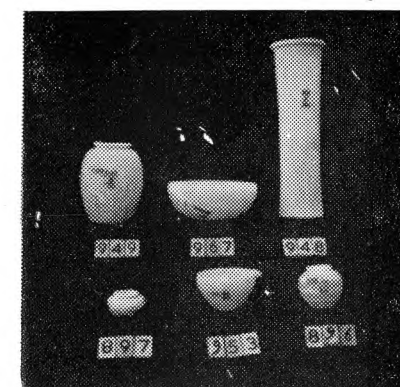
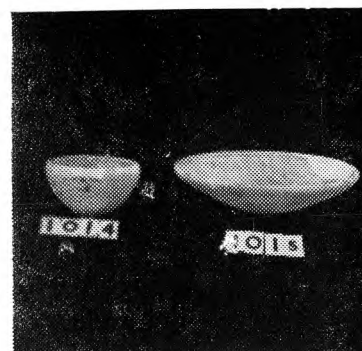




Some types of pottery vessels

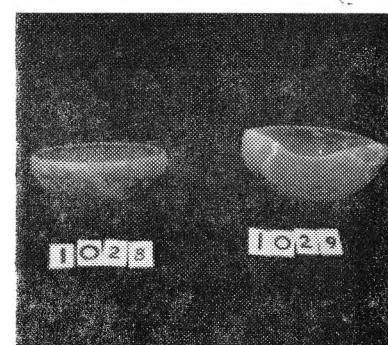
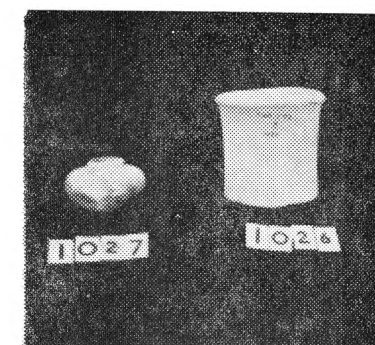
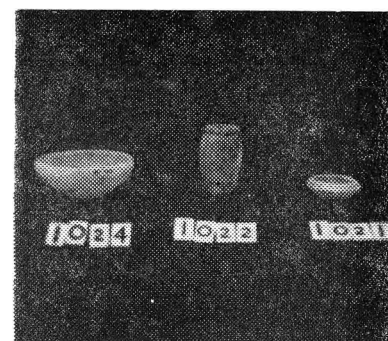


Pot marks

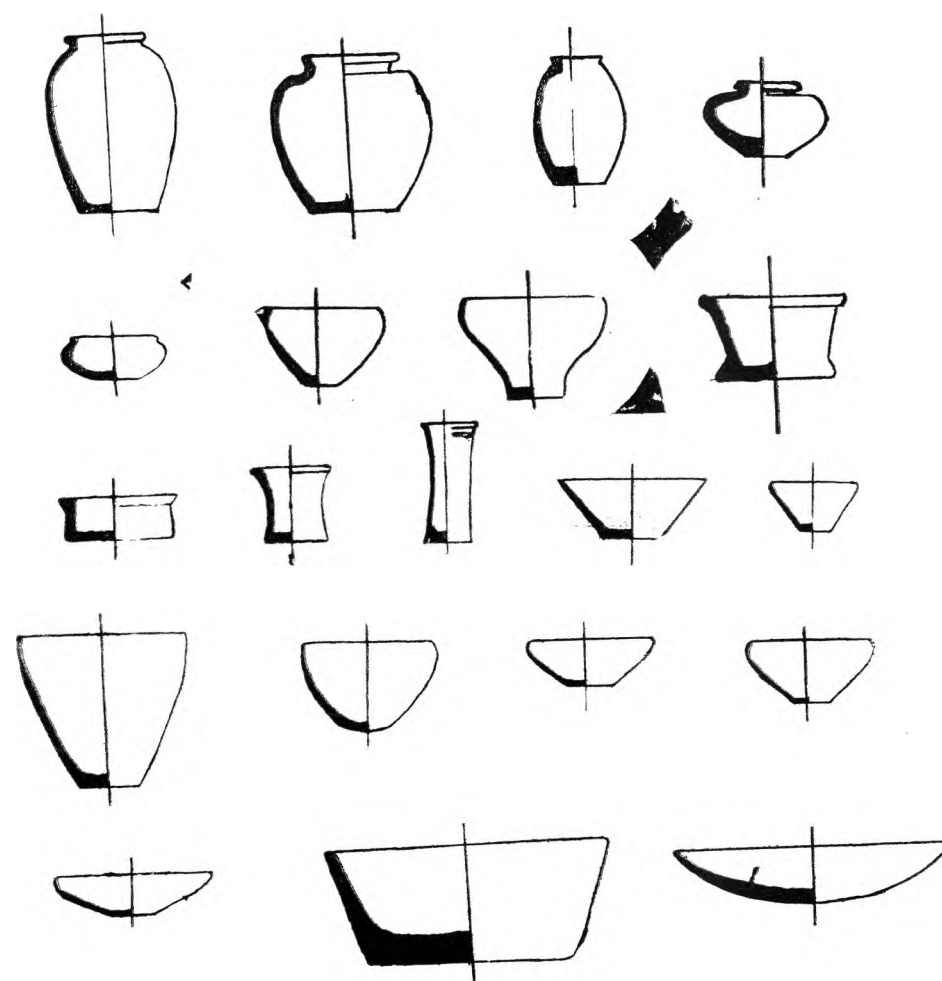


Stone vessels of alabaster  
und gypsum





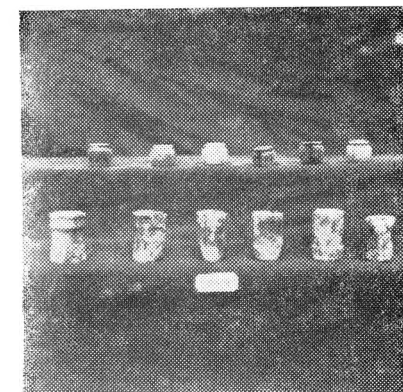
Some stone vessels of alabaster,  
gypsum, schist, and limestone



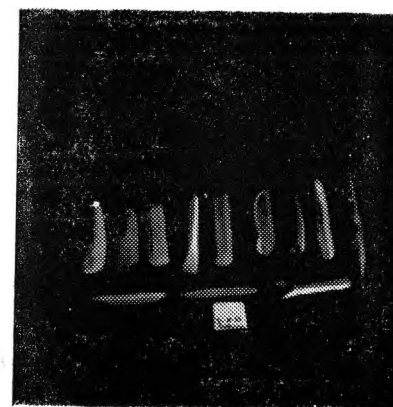
Types of some stone vessels



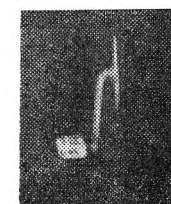
1. Castanets of ivory with the upper end carved in the form of a head of an animal.



2. gaming pieces of ivory (T. VIII 506).

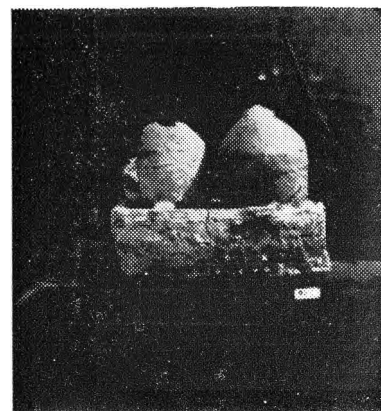


3. Knives and tools of flint (T. IX 31).

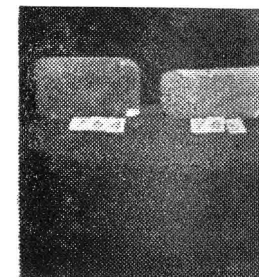


4. An object in the form of the sign "w3s" (T. IX 31).

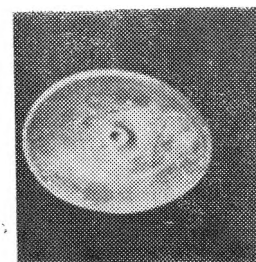




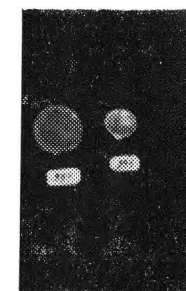
1. A model of two grainaries  
in clay  
(T. VIII 506)



2. 2 slate palettes

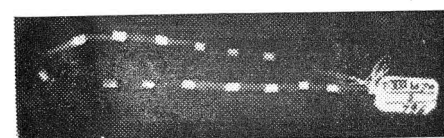
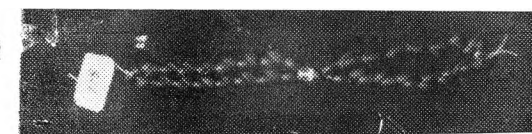


3. An object of pottery probably  
a lamp  
(T. IX 62)



4. A receptacle of schist contain-  
ing remains of yellow ochre, and  
a small shell containing remains of  
brown paint  
(T. VIII 506).

5. A string of tubular beads of  
steatite



A string of carnelian beads barrel-  
shaped and in the form of shells  
and one barrel-shaped bead of  
rock crystal  
T. VII 1044

**A PROPOS DE L'ICONOGRAPHIE DU CERCUEIL No. 2238 AU**

**MUSEE DE TURIN**

**RAMADAN EL SAYED**

Provenance : Thèbes-Ouest

Epoque : XXI<sup>e</sup> dyn.

Dimensions : longueur, 1,90.; largeur, 0,50m. environ

Matière : bois de sycomore stuqué, peint et verni

Ce cercueil, à double couvercle, appartient à un certain Bapouen (1), dont, malheureusement, nous ignorons les titres. Il a été décrit brièvement dans le Catalogue du Musée de Turin (2) comme appartenant à la XXI<sup>e</sup> dyn., ce que le style et la décoration semblent confirmer (3). A signaler que le cercueil ne figure pas dans la liste de ceux donnés par Daressy comme provenant de Deir el Bahari (4). Il existe là un problème parfois assez délicat quant à la datation de certains cercueils de ce type; on le sait, beaucoup d'entre eux furent trouvés dans la cachette de Deir el Bahari abritant des momies qui n'étaient pas celles d'origine, la première occupante ayant disparu; la mise nu point de Daressy reste fort utile (5).

**A. Le couvercle extérieur.**

La finesse du visage est remarquable; la perruque rayée qui descend jusqu'à la poitrine est ornée d'un bandeau en fleurs de lotus sur le disque solaire montre, de chaque côté, un oeil oudjat posé sur une grand collier, Ousekh terminé par un rang de perles et avec des taches en forme de têtes d'éperviers. Les deux mains, croisées et posées à plat sur la poitrine, ont les doigts repliés sauf les pouces; les poignets portent des bracelets, une fleur de lotus est à hauteur du coude. Au-dessus des mains est un scarabée ailé supportant le disque solaire, et, à droite et à gauche, deux uraeus aussi, protègent de leurs ailes un signe shenou. Sous le repli des bras est un pectoral où l'on voit à nouveau, un scarabée ailé, mais ici à tête de bélier; au-dessus de lui le disque solaire montre, de chaque côté, un oeil oudjat posé sur une corbeille neb; le scarabée lui-même est placé dans une barque posée sur le signe du ciel. De part et d'autre est Osiris assis sur un siège cubique, coiffé de la couronne blanche et portant le heka, un oiseau-âme est en adoration devant lui : à droite l'oiseau est placé entre les ailes déployées de la déesse Neith qui porte sur la tête le signe de son nom; à gauche c'est Selkit; toutes deux accroupies sur le signe neb. Au-dessous, on voit Nout, assise, avec de grandes ailes déployées, tenant le ankh et le maât; au-dessus d'elle, à droite et à gauche, un uraeus ailé protège un signe shenou; derrière chacun d'eux est un oeil oudjat,

muni d'une aile(7) et posé sur un neb. Sous la déesse Nout, se trouve au milieu, à nouveau un scarabée ailé poussant devant lui un disque solaire protégé par deux uraeus. A droite et à gauche sont Nephthys et Isis accroupies sur un signe neb; ailes déployées, elles protègent un oeil Oudjat. Derrière le deux déesses un Osiris momiforme, coiffé de la couronne blanche, est face à un autel portant un vase nemes avec une fleur de lotus(8) épanouie.

Sur la partie correspondant à l'entre-jambes, on peut distinguer, l'un au dessous de l'autre, trois tableaux étroits qui se terminent par quatre lignes d'inscriptions au niveau des pieds :

1. un naos surmonté d'une rangée d'uraeus ornés en dessous d'un fétiche, renferme un scarabée ailé avec, au-dessus le disque solaire protégé par deux uraeus, au-dessous un signe shen ayant, à droite et à gauche un oudjat.
2. Isis et Nephthys agenouillées dans un naos surmonté de fétiches se lamentent face à la châsse d'Osiris; celle-ci protégée à droite et à gauche par l'oeil Oudjat ailé et muni de l'uraeus coiffé du disque.
3. c'est la répétition du tableau n°1

Le texte est écrit sous une rangée de fétiches :

à droite : «Paroles à dire par Selkit.....»

à gauche : «Paroles à dire par Neith, la grande Mère divine...».

Sur la partie correspondant aux jambes sont trois tableaux symétriquement disposés, surmontés chacun d'une courte légende :

1. A droite, Ptah-Sokar est assis sur un siège cubique, posé sur un neb; le dieu est dans un naos, il est barbu et coiffé du disque, il tient le heka et le ankh, devant lui est la nébride, derrière lui est une divinité debout levant la main droite. A gauche, c'est la même scène, mais avec le dieu Osiris-Sokar à tête d'épervier, coiffé de l'atef, tenant aussi le heka et le ankh, devant lui une forme momifiée, derrière lui, également une divinité debout mais levant la main gauche.

Au-dessus on lit : (à droite) "féal te Ptah-Sokar, maître du sanctuaire"  
(à gauche) «féal d'Osiris-Sokar, dieu grand, gouverneur des vivants..

2. A droite et à gauche, dans un naos, est un épervier coiffé de l'atef, debout sur un uraeus dressé coiffé du disque. Au-dessus, on lit à droite, «féal de Sokar, maître de Ro-Setaou...».

à gauche, «féal de Sokar-Osiris, gouverneur de.....».

3. A droite et à gauche, dans un naos, est un bélier debout sur un neb; au-dessus, un uraeus ailé. La légende, de chaque côté, est : "féal du grand bélier».

Sur les pieds, à droite et à gauche, sont les déesses Isis et Nephthys, accroupies, qui se lamentent sur Osiris. Au-dessus de chacune d'elles, est un oudjat ailé. A droite on lit : «féal de Nephthys», à gauche «féal d'Isis».

## B. Le couvercle intérieur.

L'ensemble est à peu près semblable, mais le visage est un peu plus arrondi; même sorte de perruque et même bandeau en fleurs de lotus; même disposition des mains; le large collier semble représenter des fleurs et est attaché également par des fermetures en forme de têtes d'éperviers. On retrouve ensuite le scarabée ailé, à tête de bélier, surmonté du disque flanqué de deux uraeus. Au bas de la perruque, à nouveau deux uraeus ailés. A hauteur des coudes, de chaque côté, est une divinité accroupie tenant le signe maât sur les genoux. Le grand pectoral représente, comme pour le 1er couvercle, un scarabée à tête de bélier, avec au-dessus de lui, le disque muni des deux uraeus; de chaque côté est un Oudjat posé sur un neb, et, plus loin, sur le même plan, deux éperviers coiffés du disque sont debout sur un uraeus dressé; au-dessus est un oeil Oudjat ailé avec l'uraeus; devant chaque épervier est une offrande; le texte dit : «Ptah-Sokar, dieu de la Douat»

La déesse Nout est là aussi, mais agenouillée, déployant ses grandes deux uraeus, avec, de chaque côté, deux uraeus plus grands, protégeant de leurs ailes, un Oudjat posé sur un neb; derrière ces grands uraeus sont, de chaque côté aussi, encore un Oudjat ailé avec uraeus; sous les ailes de Nout, à droite et à gauche, on voit figuré un Anubis(9) accroupi.

Sur la partie correspondant à l'entre-jambes, au lieu de tableaux, on trouve cette fois, deux lignes verticales d'inscriptions qui descendent jusqu'aux pieds :

A droite «Paroles à dire par l'Osiris Bapouen : (Que j'entre) par les Portes des Portails mystérieux de la Douat! Que je suive Sokar-Osiris dans Bousiris et dans Abydos (10), afin de faire la transformation en Phénix divin(11). comme les esprits qui suivent Rê, et faire (aussi) ce qu'aiment les gens, et ce que louent les dieux.....»

à gauche» Paroles à dire par l'Osiris Bapouen : il dit : Que Nout étende ses bras sur moi. en ce sien nom de Celle qui étend ses bras pour chasser l'obscurité, Celle qui fait monter la lumière (hddwt) dans la place où (je) suis(12)! Que (je) sorte comme une âme vivante pour voir le disque à son lever(13).....».

Sur la partie correspondant aux jambes, on retrouve trois tableaux symétriquement disposés et avec une courte légende.



1. A droite, assis sur un siège cubique dans un naos surmonté d'une rangée d'uraeus; derrière le dieu, un Oudjat ailé muni d'un uraeus au disque; il tient le flagellum et le heka; devant lui, un autel sur lequel est un vase nemes avec une fleur de lotus épanouie; face au dieu est un Oudjat ailé; le défunt, devant le dieu, momiforme et avec une longue barbe, lève la main droite; au-dessus on lit : «féal de Ptah-Sokar qui préside le sanctuaire.....».

A gauche, c'est la même scène mais avec Osiris coiffé de la couronne blanche munie d'un uraeus sur le front; le dieu est dans la même attitude et a les mêmes attributs; le défunt également; sur l'autel est une sorte de laitue; au-dessus on lit : «féal d'Osiris régent de l'éternité qui donne les offrandes.....».

2. A droite on voit Sokar-Osiris sous l'aspect d'un épervier coiffé de l'atef debout sur un uraeus dressé sur un socle maât; le naos dans lequel est le dieu est placé sur un signe neb; ce naos est surmonté d'une rangée d'uraeus, on voit Ptah-Sokar avec une tête d'épervier coiffé duquel est suspendu un signe ankh; devant le dieu, une sorte de laitue, symbole de fécondité; au-dessus, on lit : «féal de Sokar maître de Ro-Setaou dieu grand». Sous le signe neb, on voit un motif décoratif de 4 nefer et 2 oudjat.

3. A droite et à gauche, on voit un bélier, debout dans un naos surmonté d'une rangée d'uraeus et posé sur un neb; devant le bélier est un uraeus coiffé du disque; au-dessus, un autre uraeus ailé protège un shen; au-dessus encore, on lit, de chaque côté : «féal du grand bélier qui est dans la Douat....».

Sur les pieds, à droite et à gauche, on voit Isis Nephthys agenouillées sur un neb, dans un naos à toit arrondi; devant chacune est un vase chargé de pains et de légumes (une botte d'oignons?)(14). Au-dessus on lit : «féal de Nephthys la Mère divine » à droite, et gauche : «féal d'Isis, la Mère divine....».

### C. La cuve.

Extérieur, côté droit.

Tout le long de la paroi, en haut, court une frise décorative composée d'uraeus et de plumes en alternance. En-dessous, la surface est divisée en 8 tableaux.

1<sup>er</sup> tableau en partant de la tête : Dans un naos à toit arrondi on voit Ptah-Sokar sous la forme d'un épervier debout sur un uraeus dressé lequel est posé sur un socle en forme de maât, l'ensemble est placé sur un socle haut; le dieu est coiffé de l'atef et, devant lui, un autel est chargé d'un vase nemes avec une fleur de lotus épanouie; à côté du support de l'autel, une laitue. Derrière le dieu est un uraeus coiffé du disque et posé sur un neb, entre ses ailes, un oudjat; sous le neb un

autre oudjat. Devant le dieu, on lit : «Ptah-Sokar-Osiris de la Douat». 2<sup>ème</sup> tableau : dans un naos semblable au précédent est un Thoth à tête d'ibis, il tient l'emblème de l'Occident; face au dieu est un autel avec un nemes contenant un lotus; derrière Thoth, on lit : «Paroles à dire par Thoth Seigneur des paroles divines, scribe de la justice et de la Grande Ennéade....».

3<sup>ème</sup> tableau : Shou coiffé de la plume de maât Shou, fils de Rê dieu grand, soulève la déesse Nout étendue au-dessus de Geb qui, lui est allongé à terre; à côté, on lit : «Geb, le noble des dieux»; deux oiseaux-âmes posés sur un neb, aident Shou en lui soutenant les bras; devant chacun d'eux est une corbeille chargée d'offrandes; sur leur tête, une plume de maât; au-dessus de celui de droite, un oudjat ailé; au-dessus de celui de gauche, un oudjat ailé; au-dessus de Nout, on lit : «Paroles à dire par Rê-Horakhti-Atoum, seigneur du Grand Château, qu'il donne la justification dans Ro-Setaou....».

4<sup>ème</sup> tableau : le défunt, debout dans un naos à toit arrondi, lève la main gauche en adoration et offre l'onguent de l'autre; devant lui, on retrouve l'autel avec un nemes, un lotus, une laitue. Devant lui, 4 lignes de texte : «Salut à toi, Osiris qui es sur son estrade, maître de terre, qui présides la nécropole, le justifié qui es au milieu de la Douat! Salut à toi, l'unique dans l'acacia, qui es sur son sable, maître de Ro-Setaou, régent de la Terre sacrée, grand dans Abydos, roi dans Bousiris, puissant dans le Grand Château ! donne la justification comme (pour) tes suivants, (afin) d'entrer et de sortir...» Derrière le défunt, le texte effacé permet seulement de lire : «Osiris...».

5<sup>ème</sup> tableau : c'est un tableau très élaboré où l'on voit, à droite, une déesse à tête de serpent et à corps humain tenant deux couteaux(15); au-dessus, on lit : «Celle qui embrasse Horus comme un dieu», elle regarde vers l'extérieur de la scène; un long serpent qui part de derrière cette déesse occupe tout le tableau; il longe une double estrade le long de laquelle on peut distinguer, au milieu, un signe nefer; à droite, un uraeus sur un signe maât, et, à l'arrière, une étoile et un disque solaire; à gauche, un vautour(16) debout sur un maât, et, à l'arrière aussi, une étoile, avec, plus haut, 3 rames. Hors de l'estrade, à droite, un oudjat sous lequel sont 3 rames; à gauche, un bélier à tête d'hippopotame (Shai). Sur le dessus de l'estrade est posé une corbeille neb sur laquelle on voit le trône d'Osiris avec le dieu assis, coiffé de l'atef, tenant le heka et le flagellum; deux dieux semblent venir vers lui : Horus hiéracocéphale et Thoth «seigneur de Maât et scribe de Maât». Le 1<sup>er</sup> dieu coiffé de la double couronne, tient en main droite le héka et le ankh, il lève la main gauche; le second tient seulement le heka. Derrière Osiris se tiennent, debout, Isis et Nephthys, chacune coiffée du signe de son nom, tenant en main gauche le ankh et levant la droite vers le dieu;

devant chacune des déesses est un vase avec un boutons de fleur.  
**6ème tableau :** 3 divinités momiformes sont debout dans les replis d'un long serpent; celle du milieu à tête de bélier, c'est le bélier - thm grand de la Douat; celle de droite à tête de chacal, c'est Horus grand de formes; celle de gauche à tête de lionne, c'est «Isis grande d'odeur»  
 A droite, on lit : «Paroles à dire par Osiris, maître de l'Eternité qui est en tête de l'Occident, régent de tous les vivants».

**7ème tableau :** un personnage au crâne rasé, debout dans naos, tient un sistre en main droite et lève la gauche; au-dessus de lui on lit : «maître de l'Eternité»; à droite, on peut lire : «paroles à dire par les Maîtres de l'Eternité qui sont en tête de la Pérennité, ils donnent des offrandes».

**8ème tableau :** le défunt est agenouillé levant les deux bras pour recevoir un plateau chargé d'aliments et de fleurs des mains de la déesse de l'Occident coiffée du signe ament. Au-dessus du défunt, on lit : de l'Occident surmonté de plumes. A gauche, on lit : «Paroles à dire "adoration d'Osiris qui est en tête de l'Occident, Ounen-nefer, régent des vivants". Au-dessus de la déesse : «Khefet-her-neb-es, dame de la Terre sacrée, régente du bel Occident», et, devant elle : «reçois les Occident, (celle qui donne) les offrandes...» A remarquer que le noeud montagne, on voit une vache tachetée, le disque surmonté des deux plumes entre les cornes; un sistre tenu par une corde est à son cou; devant le socle qui soutient le tout est une laitue; au-dessus de la vache un uraeus ailé protège un shen; au-dessous, on voit le versant d'une montagne au bas de laquelle est couchée un chacal; derrière celui-ci se trouve un édifice haut et étroit surmonté d'un pyramidion; sur la porte de l'édifice, on lit : «Osiris» ainsi que sur le pyramidion; un oudjat ailé le protège. Derrière, on lit : «Paroles à dire par Hathor, dame de la Terre sacrée, celle qui donne les offrandes.....».

Scène de l'arrondi de la tête.

Elle montre un grand noeud d'Isis, avec, chaque côté un, signe de l'Occident surmonté de plumes. A gauche, on lit : «Paroles à dire par Nephthys, la soeur du dieu, l'oeil de Rê, régente de la Maison de l'embaumement(17), celle qui donne les offrandes». A droite : «Paroles à dire par Isis, la Grande Mère divine, l'oeil de Rê, régente du bel Occident, (celle qui donne) les offrandes...» A remarquer que le noeud d'Isis se trouve représenté, sur certains cercueils, aux pieds, ou bien dans le fond de la cuve, à l'intérieur(18).

Extérieur, côté gauche de la cuve.

Il n'y a que six tableaux de ce côté.

**1er tableau,** toujours en partant de la tête : on voit, au milieu, un pilier Djed coiffé de corne sur lesquelles reposent, aux deux extrémités, deux uraeus dressés, eux-mêmes coiffés d'un disque, et, vers le centre, deux hautes plumes entre lesquelles est un autre disque; sous les cornes de texte : «Salut à toi, Osiris qui es sur son estrade, maître de ter-

ment deux flagellum, il est posé sur un neb; au-dessus, à droite et à gauche, un oudjat ailé; on lit : «Seigneur de Bousiris, régent des vivants». De chaque côté du pilier, Neith et Selkit, sous l'aspect d'un uraeus ailé coiffé de l'atef, sont posées sur un neb; elles protègent de leurs ailes un oudjat; chacune est munie du signe shen.

**2ème tableau :** à gauche Thoth à tête d'ibis est coiffé du croissant avec le disque solaire, il tient le signe de l'Occident, c'est «Thoth, seigneur de la justice»; devant lui est une laitue et un autel avec un vase nemes contenant une fleur de lotus. Précédent Thoth est le dieu Horus à tête de faucon coiffé de la double couronne; de la main gauche il tient le heka et, de la droite, il salue son père Osiris; devant lui est une corbeille avec des pains et une botte d'oignons. Au-dessus de lui, on lit : «Horus qui venge son père», les signes sa, le ankh et le ouas le protègent à l'arrière. Osiris tenant le heka et le flagellum, coiffé du disque, est assis sur un siège cubique posé sur un neb; devant sa tête on lit : «maître de l'Eternité, régent des vivants»; on voit aussi un oudjat ailé et un signe nefer. Derrière le dieu est Nephthys, debout, coiffée du signe de son nom et déployant ses ailes entre lesquelles est un vase chargé de pains, bottes d'oignons et autres légumes; elle tient le ankh et le maât; c'est «la soeur du dieu régente de la Maison de l'embaumement». Une ligne de texte dit : «Paroles à dire par Osiris, Seigneur de l'Eternité, qui est en tête des Occidentaux, que est en tête de la nécropole, régent des vivants, maître de la Pérennité».

**3ème tableau :** le défunt, dans un naos à toit arrondi, tient dans la main gauche un sistre et il lève la main droite; devant lui est un autel avec un vase et une fleur de lotus, une laitue à côté du support. Quatre lignes de texte disent : «Salut à toi Rê-Atoum-Kheperi, père des dieux qui fait son corps, qui crée sa chair, élevé plus que les dieux, placé dans le ciel plus que son bélier divin, qui se lève et se couche chaque jour, dieu maître de ceux qui viennent en adoration pour Atoum à son lever! Donne la justification comme (pour) ton suivant, (afin) d'entrer et de sortir dans le bel Occident, comme ceux qui existent éternellement».

**4ème tableau :** il est divisé en deux registres par le signe du ciel; en haut, la barque solaire, semblable à celle que nous avons vue sur le couvercle extérieur, porte, à la proue l'oiseau ouvert; au-dessus, on lit «Rê-taoui»; au milieu de la barque est un scarabée surmonté d'un disque, au-dessous, un signe shen; à droite du scarabée, Khepri avec une tête de scarabée; à gauche Atoum, avec une tête humaine et, derrière lui les signes sa et ankh; tous deux accroupis, ils soutiennent le disque; au-dessus de Khepri, un oudjat ailé et un signe nefer. Sous la barque, est un petit poisson abdjou(19). Le 2ème registre présente, curieusement une tête de faucon renversée, fixée sous le signe du ciel et qui semble émettre des rayons tombant sur une momie étendue à terre;



au-dessus de la momie, à droite, est un uraeus dressé sur un neb et coiffé de l'atef; à gauche, un vautour (mêmes position et coiffure); plus loin, à droite de la momie, se tient Hapi à tête de babouin, on lit : «Paroles à dire par Rê-Horakhti-Atoum qui éclaire les Deux-Terres»; à gauche de la momie est Kebehsenouef à tête de faucon.

5<sup>ème</sup> tableau : le défunt est à gauche, vêtu d'une robe empesée à tablier, il a deux plumes sur sa perruque et tient une plume de maât dans chaque main qu'il élève au-dessus de sa tête(20); on lit : «Ba-pou-en est venu, il est arrivé dans la salle de Double Maaty, il est justifié-devant le Maître de Maaty, il y a placé son coeur». Devant le défunt, Thoth(21) «maître de Maât, scribe de Maât», debout, semble enregistrer les paroles sur une palette. Suite la scène de la pesée du coeur(22) Anubis «préposé à la balance», procède à cette pesée(23); la balance porte sur un plateau le coeur, sur l'autre, l'image de Maât en guise de poids; de ce côté est un coffre orné d'une tête humaine coiffée d'une plume(24); au-dessus on lit : «Maât la grande fille de Rê»; au-dessus, une figure du défunt, arccroupi, les deux mains sur la poitrine(25) est «l'Osiris Ba-pou-en». Devant Osiris est l'animal infernal Shai à tête de crocodile et à corps d'hippopotame(26). Un court texte relate le résultat de la pesée du coeur. Ensuite on voit Horus «qui venge son père», debout, tenant le heka et le flagellum en main gauche, il fait le geste de présenter le défunt justifié(27) à son père, avec la main droite. Osiris est assis sur un iège cubique posé sur un neb; barbu et coiffé du disque(28), il tient à deux mains le heka; devant sa tête un oudjat ailé; derrière lui, est «Isis la belle», debout, coiffée du signe de son nom, tenant en main droite le ankh et levant la gauche vers Osiris. Derrière, on lit : «Paroles à dire par Osiris, maître de l'Eternité et de l'Occident, maître de Bousiris, il donne les offrandes».

#### D. Intérieur de la cuve.

Sur les côtés, il n'y a ni images ni inscriptions; le fond est occupé par une grande image de la déesse Nout. Celle-ci est debout sur le signe neb, les bras à peine ouverts, en signe d'accueil; sa couronne est composée de beaucoup d'éléments : sept uraeus surmontés de deux autres dressés avec la couronne blanche et la rouge, à côté un vautour avec la couronne blanche; sur le front de la déesse est un autre uraeus coiffé du disque. sa robe est ornée de perles et de plumes; deux bracelets sont à chaque bras; un voile léger avec une bordure d'uraeus recouvre sa tête et ses épaules. Devant son visage, on lit : «Paroles à dire par Nout, la grande qui a enfanté les dieux». A hauteur de sa couronne est, à droite, un uraeus ailé, à gauche, un Oudjat ailé; au-dessus, un gros disque avec, encore deux uraeus. A hauteur des bras, à droite un épervier coiffé de l'atef, debout sur le signe de l'Occident, à gauche, un serpent qui ondule. A la hauteur des jambes, de chaque côté, deux formes momifiées à tête de serpent coiffée de la plume de Maât; devant elles, on lit : «Maîtres des justifiés de la Douat».

#### Les thèmes figurés et évoqués.

Du point de vue historique, il est évident que ce beau cercueil nous laisse un peu sur notre faim puisque le propriétaire, Ba-pou-en est si discret qu'aucun titre n'est indiqué, aucune parenté; souhaitons qu'on retrouve un jour sa tombe qui a du exister à Thèbes-Ouest, peut-être dans le site de Deir el Medineh si l'on tient compte de l'architecture de certaines constructions dessinées sur le tableau 8 de la cuve, par exemple, mais ce n'est pas là une preuve. En tous cas, la décoration et l'exécution sont remarquables et le temps n'a pas trop altéré les peintures ni les textes. Le nombre des tableaux a obligé l'artiste à beaucoup de minutie puisque chaque scène, chaque objet est de petite dimension et la finesse d'exécution n'en est que plus manifeste. Toute la surface est occupée par des objets symboliques multipliés, le défunt ayant à regarder des scènes et non des textes selon la coutume de la XXI<sup>e</sup> dynastie.

L'intérêt essentiel réside pour nous dans cette iconographie si abondante qui est comme le reflet de la pensée religieuse d'alors. Il semble que tout ce qu'on croyait, tout ce qu'on espérait pour arriver à l'autre vie, est exposé là. On dira qu'il en est de même pour tous les cercueils de la même époque et qu'il n'y a pas d'originalité particulière pour ce cercueil; c'est évident, mais l'état de conservation est excellent et le travail exécuté avec maîtrise comme nous le disions plus haut. L'inspiration, pour les thèmes décoratifs, provient des livres de l'Au-delà du Nouvel-Empire, comme de ceux des époques qui précéderent (Pyramides-textes, Livre des Morts, Textes des Cercueils etc.). On sait combien il importe au mort de connaître les images, les noms des dieux, les différents noms du même dieu, les formules pour avancer dans le voyage, pour sortir au jour et rentrer. Il y a pour ce cercueil comme une illustration de la valeur créatrice de l'image qui est susceptible d'aider à la transformation de celui qui la connaît, de l'aider à devenir un être divin lui-même(29). Le défunt est sous la garde de toutes les divinités représentées(30). La forme du cercueil est arrondie vers la tête, comme la voûte céleste(31). Les formes du dieu-soleil sont abondamment évoquées : disque, scarabée ailé ou sans ailes, avec une tête de bélier ou Horus à tête de chacal, Khepri dans sa barque, parfois adoré par Khepri lui-même. A remarquer qu'Osiris même sera parfois coiffé du disque solaire. Le défunt sollicite la protection des divinités osiriennes célestes et infernales, celles que nous avons coutume de trouver sur les cercueils, Ptah-Sokar-Osiris en particulier. Sur les couvercles ainsi qu'à l'extérieur de la cuve, comme on l'a vu, tous les dieux protecteurs sont représentés, et le panthéon est abondant : Nout, Thot, Geb et Shou, Isis et Nephthys, Neith et Selkit. A noter un tableau rare représentant cette tête de faucon renversée placée sous le signe du ciel et qui semble envoyer des rayons lumineux à la momie.



Mais la caractéristique de la décoration de ce cercueil, c'est peut-être l'abondance des objets symboliques, comme on a essayé de le montrer dans la description : on ne pourrait dénombrer les uraeus, les Oudjats ailés ou non ailés, posés sur des neb, on se souvient que l'oeil Oudiat exprime la voyance totale, la fécondité universelle dans laquelle le défunt, consumé, pourra renaître de nouveau, le gardien de la justice(32). Autre symbole fréquent : le shen qui évoque l'éternité(33) et aussi le noeud d'Isis, le pilier Djed; le souci d'obtenir la transformation en phénix divin est nettement exprimé aussi.

Nous retrouvons aussi la représentation des offrandes habituelles : lotus, onguent, laitue, oignons, tous porteurs de force divine(34) ainsi que l'utilisation du vase nemeset qui sert au rite de l'ouverture de la bouche(35).

#### Notes.

1. Ce nom ne figure pas dans Ranke, **PN**, mais il est cité par Seeber, **Unters. zur Darstel. des Totengerichte (MAS 35)**, p.256 (index)
2. Fabretti-Rossi-Lanzone, **Museo Torino**, p.316-7; ce cercueil est cité plusieurs fois par Seeber, **o.c.**, p.41 n. 149, p.84 n. 308, p. 100 n. 375, p. 102 n. 384, p. 166 n. 765, p. 170, p. 215 (29), p.240 (3)
3. Voir Schmidt, **Sarkofager, Mumiekister**, p. XIII(introd.), p.129-134 fig. 670-717; Daressy, **Cerc. des cachettes royales**, p. III (introd.); id., **ASAE I**, 1899, p. 142; Moret, **Sarco. de l'ep. bubast.**, p. XIV (introd.); Gauthier, **Cerc. anthr. des prêtres de Montou**, p. VI (introd.); Seeber, **o.c.** p.41, 215 (29), 240 (3)
4. Daressy, **ASAE 8**, 1907, p. 18
5. Daressy, **Cercueils des cachet. royales**, p.242-3
6. Nous tenons à remercier Mr Curto qui a bien voulu nous communiquer les photos de ce cercueil
7. Bonnet, **Reallexikon**, p. 854; Virey, **La religion de l'anc. Egypte**, p. 225-6; Mayassis, **Le livre des Morts**, p. 346; Derchain, **Mythes et dieux lunaires**, p. 21,35; id., dans **ZAS 83**, p. 75-6; Englund, **Boreas 6**, 1974 p. 64.
8. Sur le rôle du lotus comme une évocation de la naissance, cf. Sauneron-Yoyotte, **La naissance du monde**, p. 37; Englund, **o.c.**, p. 63.
9. Peut-être-il qualifié ici de : «maître de la nécropole» (t3-dsr), cf. Caire CG. 61027 = Daressy, **o.c.**, p. 66.
10. Pour la même formule, cf. Cercueil Caire CG. 61024=Daressy, **o.c.**, p. 42 & n° 61027 = id., **o.c.**, p. 74.
11. Pour la même formule, cf. Caire CG. 61032 = id., **o.c.**, p. 178.

12. Pour la même formule, cf. Caire CG. 61027 = id., **o.c.**, p. 67 & 80.
13. Pour la même formule, Caire cf. CG. 61024 = id., **o.c.**, p. 42 & no 61027 = id., **o.c.**, p. 67 & 74.
14. Que le défunt portait lors de certaines fêtes, cf. Englund, **o.c.**, p. 64.
15. Sur cette déesse, cf. Seeber, **o.c.**, p. 180—2 fig. 72—3.
16. Le vautour femelle assure la protection de la momie contre les ennemis et les forces de la nature, cf. Lexa, **Magie I**, p. 83.
17. II se trouve à Thèbes-Ouest; à ce sujet, cf. Rowe, **ASAE 38**, p. 174 — 5 n. 3; Chassinat, **Mystère d'Osiris II**, p. 362.
18. Cf. Jéquier, **Frise d'objects**, p. 335 — 6; Schafer, **ZAS 62**, p. 108 — 10.
19. Son rôle est d'avertir lorsqu'apparaît un ennemi, cf. Erman, **Religion**, p. 37; aussi Koenig, **BIFAO 79**, p. 107 — 108 n. (b).
20. Sur la justification du mort, la salle du coeur, cf. Seeber, **o.c.**, p. 63—7,77—80,100—1 et aussi le C.R. de ce livre par Te Velde dans **CdE 53**, p. 268—9.
21. Sur le rôle de Thoth et des autres divinités, non comme protecteurs mais comme juges, cf. Seeber, **o.c.**, p. 147 — 154; Te Velde, **o.c.**, p. 269.
22. Voir aussi Seeber, **o.c.**, p. 69 — 83, 92—103, 105—111, 134—142, 161—165,181—5; Yoyotte, **Le jugement des morts (Sources orientales 4)**, p. 39 — 42.
23. Sur Anubis, cf. Seeber, **o.c.**, p. 154—8; Velde, **o.c.**, p. 2169.
24. Cf. Seeber, **o.c.**, p. 72 — 84 fig. 18—24 — 5; sur le rôle de Maât, cf. id. **o.c.** p. 139—147.
25. Cette image symbolise la vie renouvelée, cf. Seeber, **o.c.**, p. 102—3; Te Velde, **o.c.**, p. 269.
26. Sur le rôle de Shai, cf. Seeber, **o.c.**, p. 83—8, p. 163—4, 166—172. voir aussi, Quaegebeur, **le dieu égyptien Shai**, p. 75.
27. Sur le rôle d'Horus, cf. id., **o.c.**, p. 159—162.
28. Sur Osiris comme dieu des morts, cf. id. **o.c.**, p. 123 et, comme dieu solaire, id., **o.c.**, p. 120 — 3.
29. Posener, **Dict. de la civil. égypt.**, p. 156; Englund, **o.c.**, p. 39.
30. Moret, **o.c.**, p. IX (introd.)
31. Moret, **o.c.**, p. IX (introd.)
32. Sur le Oudjat comme gardiende la justice, cf. Derchain, **ZAS 83**, p. 75 — 6; Seeber, **o.c.**, p. 71 n. 253.
33. Jéquier, **Considérations**, p. 47.
34. Englund, **o.c.**, p. 61 — 65.
35. Otto, **Mundoffnungrritual**, p. 37 — 8.



Fig. 1. A. Le couvercle extérieur (Turin 2238).





Fig. 2. B. Le couvercle intérieur (Turin 2238).



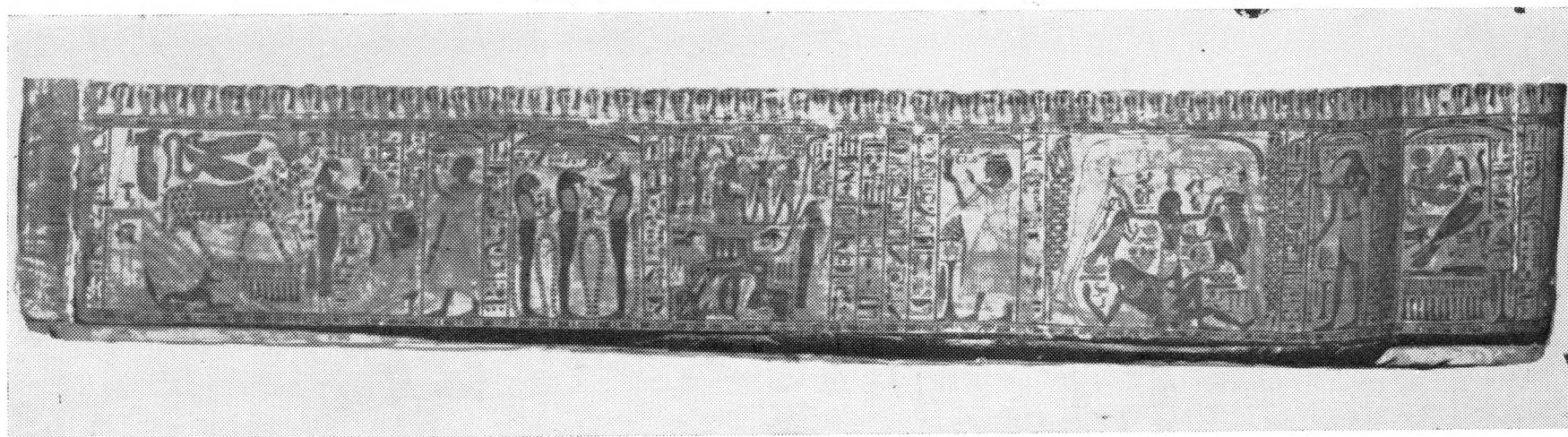


Fig. 3. C. La cuve, extérieur, côté droit (Turin 2238).



Fig. 4 C. La cuve, extérieur côté gauche (Turin 2238).



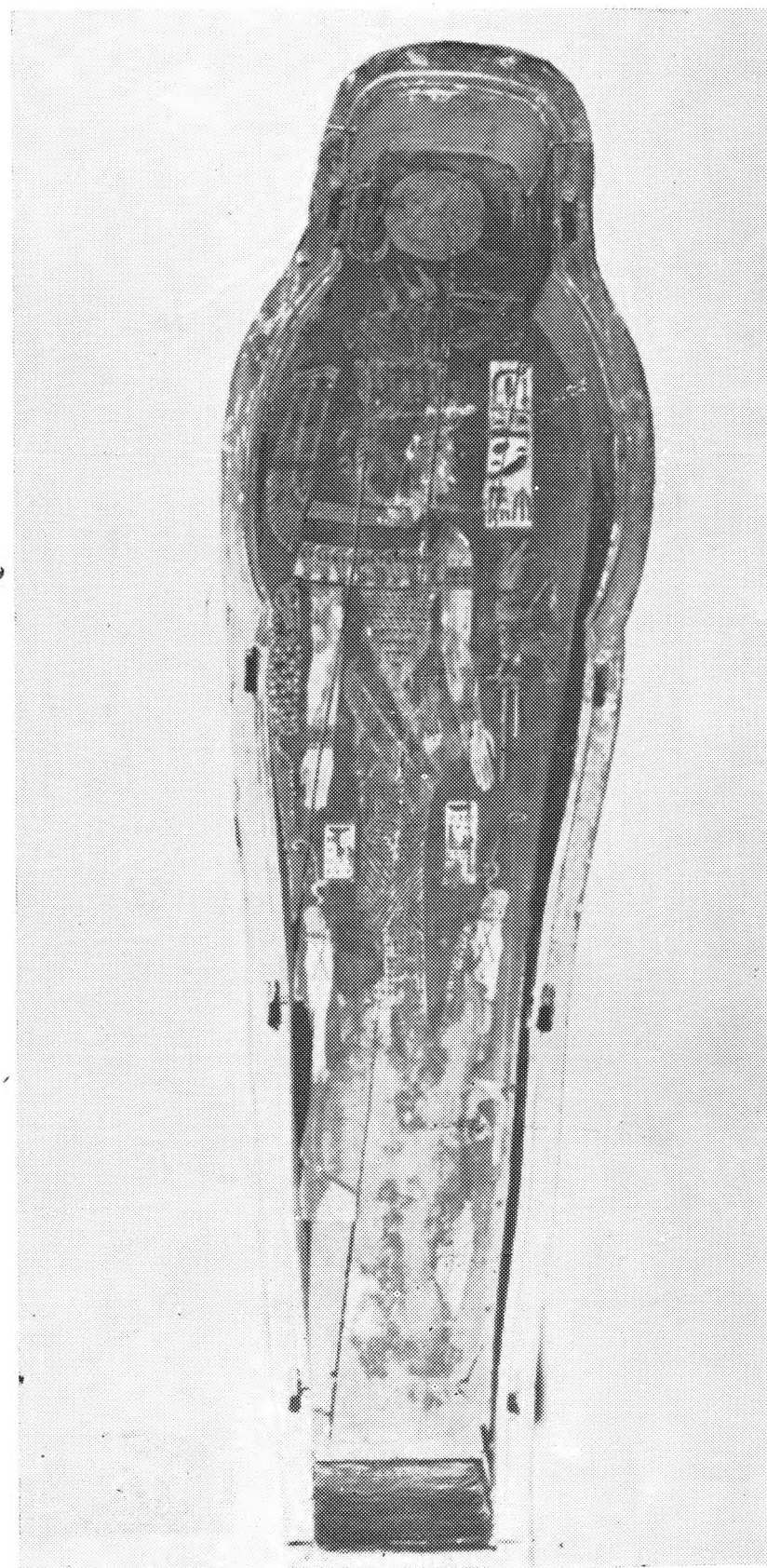


Fig. 5. D. Intérieur de la cuve (le fond). (Turin 2238).








معاني رموز العين


Par G. de WIT



حضرات الزملاء ، الأساتذة

سيداتى وسادتى

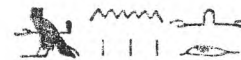
فى معبد دندره نجد اسم الاله lmn مكتوبا هكذا  بينما فى العادة تكتب هكذا  وقد ورد هذا الاسم فى مخطوطة فى متحف اللوفر هكذا  وهى مخطوطة لم تنشر بعد .

أما فى معبد أسنا فيوجد اسم الالهة mnhyt هكذا  بينما هوفى اعادة تكتب هكذا 


وفى أمثلة أخرى لاسم الالهة mnhyt مثل  و

 نلتقى بها فى معبد فيله فى أسوان  mnhyt

أما فى القاموس (Wb) فلا يوجد إلا واحد مكتوب هكذا

 mn ومع ذلك فى قاموس (Dictionnaire, Brugsch) المشهور

تجد كلمة  mn/mntj تلك التى تعنى «جبلين» كذلك نجد فى

De Rougé, Chrestomatie نفس التعبير مكتوبا بعلامتى العين هكذا 

والنتيجة أن العينين والحدقتين والعين wdst لها نفس معنى الحروف mn ولقد


سبق لى أن قلت فى مقال Mélanges Pirenne أن الحرف «م» مشتق من الفعل m33

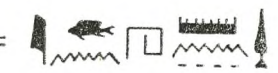
وأن الحرف «ن» مشتق من الفعل nw ينظر وهذا فى الحقيقة كان خطأ من جانبي

فى هذا المقال .

والأستاذ G. Lefebvre قد أعطى شكل الفعل m3n من الفعل m33 ويرى كذلك

الأستاذان De Meulenaere; Derchain وقد تبادلا الرأى فى m33=mn واكتفيا

بأن يسفولما الألف ليحصل معنى De Meulenaere. mn وجد أن اسم شخصي قد كتب  
هكذا Nes-Min=ns-mn=  ولقد وجدت

في قاموس Wb الكلمة inhmn (رومان)  =

بحيث نرى أن مجموعة m3 «ما» ومجموعة mn وتخل أحدهما مكان الأخرى .

وأمثلة أخرى نجدها مثل 3kdkd مكتوبة nkdkd أيضا كلمة g3f نجدها

تخل محل أو ترادف gnf «بدفع» وقد نقرأ هاتين العينين بمعنى m33 يرى «أو ينظر»

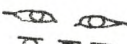
كما يمكن أن نقرأ الفعل m33 مكتوبا مع عين واحدة. وقد رأى Sauneron


ان العينين يمكن أن تقرأ n + m وان العين الواحدة أو العين wd3t

يمكن أن تقرأ D' Quagebeur: n وجد ان العين البسيطة تعني i وفي مجموعة

mi نرى أن العين يمكن أن تقرأ s3-mi-nn  = 

وكما قلنا سابقا أن الحدقتين يمكن ان تقرأ mn و m33 oo في معبد ادفو ir=o مثل

و hrw=o و rir 3b يمكن تكتب m3nw 

و hd nGb 

أشكر الأساتذة :

Derchain, De Meulenaere, Quagebeur, M. Smith

على تفضلهم باتاحة الفرصة للرجوع إلى مصادر كثيرة في هذا الموضوع .

Journées des Orientalistes belges, BRUXELLES, 25-26 mai 1977.

C. de Wit.

دى فيت.

## TABLE DES MATIERES

Frontispiece, Ahmed Kamal.

Foreword

Abou - Ghazi (Dia) - Ahmed Kamal 1849-1923 ... p. 1-5

Gaballa (G.A). - Harnakht, chief builder of Min. ... p. 7-14

Ghalioungui (P.). - The liver and bile in ancient Egyptian lore  
and medicine ... p. 15-24

Zittel (K.). - Gesetze des Kosmos. Aegyptische Zeitrechnung. ... p. 25-56

Kamel (I.) .- Sequence of events which led up to the discovery of  
Tutankhamon's tomb ... p. 57-68

Nibbi (Alessandra) .- Some remarks on the two monuments from  
Mersa Gawasis ... p. 69-74

Moussa (A.M.). - Excavations in the Valley temple of king Unas at  
Saqqara ... p. 75-77

Irmischer (J.) .- Klassische Altertumswissenschaft Gestern und  
Heute, aus der Sicht eines Buerger der Deutschen Demo-  
kratischen Republik ... p. 79-86

Bahnassi (A.) - Le sauvetage des vestiges de la zone de submer-  
sion du barrage de l'Euphrate ... p. 87-94

Muhammed (Muh. Abdul-Kader) .- Egypto-Arabian relation in  
the ancient world:sources and studies ... p. 95-136

Shaheen. (A-Moeiz). - Treatment of some pieces of parchment  
and papyrus ... p. 137-148

Lauer (J. Ph.). - Travaux effectués à Saqqarah de fin Novembre  
1975 au 20 Mars 1976 ... p. 149-153

Youssef (Ahmed Abdel-Hameed). - Notes on the purification tent p. 155-157

Yacoub (Foad). - The Archaic tombs at Tura el-Asmant ... p. 159-161

El-Sayed (Ramadan). -A propos de l'iconographie du cercueil  
No. 2238 au Musée du Turin ... p. 163-173

Wit (C.de) ... رمز العين ... p. 175-176

Table des matières ... p. 177



